

KNOWLEDGE ECONOMY

Invest in opportunity



**Campaign for education
and against austerity**

CAMPAIGN FOR EDUCATION AND AGAINST AUSTERITY

Former secretary of state for education, David Blunkett, put forward a broad definition of adult learning that encompassed the value of learning for cultural and social enrichment as well as economic development:

*'As well as securing our economic future, learning has a wider contribution. It helps to make ours a civilised society, develops the spiritual side of our lives and promotes active citizenship. Learning enables people to play a full part in their community. It strengthens the family, the neighbourhood and consequently the nation.'*¹

Colleges and universities in the United Kingdom collectively work towards these aims for both young people and adults.

THE CASE FOR INVESTMENT IN EDUCATION

The argument for investment in education is evidenced by a significant body of research which highlights the benefits of education, these include:

Boosting employment and the economy

- Students aged 19+ in further education generate an additional £75 billion for the economy over their lifetimes.²
- The value of education related exports to the UK economy was £14.7b of which £8.2b was higher education. Higher education institutions create directly and indirectly around 670,000 jobs.³
- In 2000-10, more than half the annual GDP growth in the UK on average was related to labour income growth among those with higher education. In the UK, labour income growth among higher education graduates contributed 1.08% in annual GDP growth of 1.66% on average in 2000-10. By contrast labour income growth among those educated to upper secondary or post-secondary non-tertiary level of education contributed only 0.06% on average in annual GDP growth over the same period, and those whose level of education was below this actually made a negative contribution to GDP growth.⁴
- In 2005/6 through 'knock-on' effects the colleges generated an additional £9.1 billion in other industries throughout the UK, with the majority (£8.7 billion) accruing to industries in England.⁵
- In 2005-6 for every £1 million of FE college output, a further £1.42 million was generated in other UK industries, of which the majority (£1.35 million) tended to be in industries located in England.⁶
- FE and HE enable people to gain the right skills, qualifications and training to progress into jobs. HE and FE welcome people of all ages and backgrounds, including those who want to study part-time.⁷
- The demand for tertiary graduates in the UK's labour market continued to be strong, even during the global recession. The average employment rate of tertiary-educated individuals in the UK increased even during the crisis (by 0.1 percentage points) while the employment rate among individuals with lower

levels of education decreased by 3.3 percentage points between 2008 and 2010.⁸

- Large advantages continue to accrue to both individuals and the public from higher levels of education. The earnings premium from tertiary education is large and has grown further over recent years. Tertiary graduates also generate an extra £55 000 by paying higher income tax and social contributions – far outweighing the public cost of their education.⁹
- Individuals without an upper secondary qualification, equivalent to five good GCSEs or an equivalent vocational qualification, saw a marked drop in the employment rate by 3.3 percentage points, from 59.3% in 2008 to 56% in 2010 – greater than the OECD average decrease of 2.5 percentage points.¹⁰
- Studying for vocational qualifications in adulthood at all levels are associated with an increase in the probability of employment for those individuals who left schooling without qualifications.¹¹ In 2002 it was found that:
 - for women, compared with women who left school without qualifications and did not acquire any further qualifications, those who achieved Level 1, 2 and 3 vocational qualifications were respectively 16, 19 and 19 percentage points more likely to be employed in 2002, and
 - for men, compared with men who left school without qualification and did not acquire any further qualifications, those who achieved Level 1, 2 and 3 vocational qualifications were respectively four, 10 and 12 percentage points more likely to be employed in 2001.
- Graduates are much more likely to attain professional or managerial jobs than non-graduates. Mature graduates and non-completers^a also show an advantage over A-level and below A-level qualifiers.¹²
- Graduates are relatively protected from unemployment. However, this is less the case for mature graduates and is not the case for non-completers.¹³

Colleges and universities support their national and regional economies

- Universities and colleges act as anchor organisations in their local economies; highly unlikely to relocate, they play a distinct role in creating the long-term conditions needed for economic growth.¹⁴
- Recent research by Universities UK has indicated that, for every £1 of income for the higher education sector, it generates £2.52 in output, including job production and export earnings. From an income of £23.4 billion, the higher education sector generates about £59 billion of output through direct and secondary effects, generates about 2.6% of UK jobs, and earns about £5.3 billion in exports.¹⁵
- FE participants that started a qualification in 2008/09 will generate an additional £75bn for the economy over their working lives, over and above what they would have contributed if they had not achieved these qualifications.¹⁶
- Universities and colleges are frequently one of the largest employers in their area, universities, in particular, can boost consumer spending through student numbers, boosting local business, and can have an important impact on housing

^a people who entered higher education, but did not gain a degree

and tourism. The off-campus expenditure of international students and visitors made a further £2.4 billion contribution to GDP in 2008.¹⁷

Improving health, health literacy and wellbeing

- There is an important link between individuals' participation in learning during adulthood and subsequent changes in their health and health behaviours.¹⁸
- Adult learning can transform well-being, optimism, efficacy and self-rated health during adulthood. Health literacy and numeracy are important generators of knowledge about one's own health, improved uptake of preventative medicine, and making health control more effective. They are also important for understanding how the health service sector works, and rights and responsibilities for patients and practitioners.¹⁹
- The Kings Fund has identified that in 2008, people with no qualifications were more than five times as likely as those with higher education to engage in the following lifestyle risk factors: smoking, excessive alcohol use, poor diet, and low levels of physical activity compared with only three times as likely in 2003.²⁰
- Education has a direct effect on well-being, by helping people develop capabilities and resources which influence their well-being; it has an indirect effect, leading to outcomes that in turn allow people to thrive and increase their resilience in the face of risk; and it can have a cumulative effect, by influencing the social and economic environment in which people spend their lives. The effects on well-being themselves can be collective as well as individual.²¹

'Learning encourages social interaction and increases self-esteem and feelings of competency. Behaviour directed by personal goals to achieve something new has been shown to increase reported life satisfaction. While there is often a much greater policy emphasis on learning in the early years of life, psychological research suggests it is a critical aspect of day-to-day living for all age groups. Therefore policies that encourage learning, even in the elderly, will enable individuals to develop new skills, strengthen social networks, and feel more able to deal with life's challenges.'

New Economics Foundation 2009²²

- An evaluation of the Nottingham-based 'Prescriptions for Learning' project, in which a learning adviser worked with three GPs' surgeries, found that people experienced a marked sense of improvement in wellbeing from the moment that they became engaged with the learning adviser, and this continued throughout their learning experience.²³
- Adults show clear cognitive gains from participating in adult learning, and this is apparent regardless of whether or not the learning involves qualifications. Accredited learning appears to protect individuals against depression, and there may be some association (whether causal or not) between depression and leisure courses. Participation in learning does have an impact on adults' levels of life satisfaction, which is an important aspect of well-being, as well as showing gains among learners in optimism and self-rated wellbeing.²⁴
- Graduates are relatively more likely to perceive themselves as in 'excellent' physical health. This is also the case, but less strongly so, for mature graduates.

A younger cohort (born in 1970) also showed a strong gradient in self-assessed health by qualifications.²⁵

Learning as a tool for community empowerment

- Herefordshire Council and Liverpool City Council have identified changes and measured the social value from adult and family learning provision.²⁶ The list is wide ranging:

For learners	For wider family members	For local residents	For service providers
Learned new skills	Parents and children do more together	Took up learning and learned new skills	New and more effective approaches to service delivery
Gained qualifications	Built better family relationships	Met new people and became less socially isolated	Stronger partnership working
Met new people and became less socially isolated	Met new people and became less socially isolated	Neighbourhood became more safe and pleasant place to live	Increased reach into communities
Increased awareness of how to influence change in community	Became more involved in community	Less tension between communities	Improved the accessibility and take-up of services
Became more involved in the community	Took part in volunteering		Developed services to address barriers and meet need
Took part in volunteering and community activism	Improved mental well-being		Accessed the resources within local communities
Represented the community's views			
Improved mental well-being			
Built better family relationships			
Gained employment			
Took up further learning			

- Graduates are relatively more likely to be members of, and actively involved in, community and voluntary associations, particularly mature male graduates. Non-completers are more likely to be involved than A-level or below A-level respondents.²⁷

Social mobility and a component of poverty alleviation

- Nick Clegg has said:
*'Tackling the financial deficit is the Coalition's most immediate task. But tackling the opportunity deficit – creating an open, socially mobile society – is our guiding purpose.'*²⁸
- Social mobility declined in the last quarter of the twentieth century: children born in 1970 improved their position relative to that of their parents less than did those born in 1958. Social mobility has not risen for those born between 1970 and 2000.²⁹
- The government's adviser on social mobility, Alan Milburn, has said³⁰ that there is not a “snowball's chance in hell” that the UK will eradicate child poverty by 2020. This supports the argument for further investment in education, particularly for those who are failed in their early years.
- Vocational qualifications at all levels are associated with an increase in the probability of employment for those individuals who left schooling without qualifications.³¹
- There is a circular relationship between poverty and social exclusion, education, employment and income, and the effects are felt from one generation to the next.³²
- Poor basic skills in adults are associated with many social problems, such as unemployment, low income and poor physical and mental health. Poor basic skills are also a major factor in intergenerational poverty: low education attainment levels in parents affect their children's development and progress at school; and poverty has an impact on children's attainment at key transition points such as GCSE.³³
- Around 13 million people out of the UK population of 61 million are deemed to be living in relative poverty.³⁴ Poverty is an overwhelmingly structural problem with unequal access to healthcare, education, transportation and childcare being key contributing factors.
- Persistence in secondary education, as measured by the influence of students' socio-economic background on student test score (Programme for International Student Assessment, PISA^b) achievements, is considerable in many OECD countries. Austria, the Czech Republic, France, New Zealand, the United Kingdom and the United States of America are among the countries where socio-economic background appears to have the largest influence on students' performance.³⁵
- In the United Kingdom, having a father with tertiary education raises a son's wages by at least 20% or more, compared with a son whose father had upper secondary education. At the same time, individuals whose fathers had achieved below upper secondary education tend to earn considerably less than those whose fathers had achieved upper secondary education.³⁶
- Poverty has a disproportionate impact on some of the most vulnerable groups in our community, such as people with disabilities, pensioners, single parents and their children, and people from some ethnic minorities.
- We know that poverty contributes to inequality and social exclusion.

^b The Program for International Student Assessment (PISA) is a system of international assessments that focuses on 15-year-olds' capabilities in reading literacy, mathematics literacy, and science literacy and measures of general or cross-curricular competencies such as problem solving. PISA is coordinated by the Organization for Economic Cooperation and Development (OECD)

- Children born into poor families have poorer outcomes than those born into more affluent families: their educational achievement levels are lower, they are less likely to obtain good jobs, and their chances of developing a range of problems in later life are much higher. Poverty also reduces opportunity and makes social mobility more difficult: children from poor families are less likely than children from better-off families to improve their social and economic position over that of their parents.
- Poverty is associated with many problems such as poor health and worklessness that separate people from the mainstream of society. Poorer people find it more difficult to access the services they need, and they are often marginalised and treated with less respect; this contributes to their exclusion, and to divisions in society that undermine everyone.³⁷
- Lifelong learning is particularly associated with behaviours that could have an indirect benefit in supporting people to find routes out of poverty. This is because learning is a means for change. Adult learners consistently identify that the main benefit they have gained from learning is a change in self-perception and an increase in confidence. They also cite the ability to interact socially and to achieve better focus and self-organisation as important benefits of learning.³⁸
- Around one in five FECs performed significantly better than expected in their widening participation indicator, with a higher proportion of young full-time students from low participation neighbourhoods than might have been expected.³⁹
- FECs also compare favourably to HEIs with respect to widening participation for young full-time first degree entrants. Nearly a quarter (22.9 per cent) of all such entrants registered at FECs were from neighbourhoods with low rates of participation in HE: this is more than double the rate (10.5 per cent) for all such entrants registered at English HEIs.⁴⁰
- The balance of public funding for lifelong learning for disadvantaged people is significantly weighted towards the acquisition of skills and qualifications designed to help them gain and sustain employment; other means by which lifelong learning can contribute to poverty reduction receive much less emphasis in policy, despite the fact that there is evidence of the efficacy of a range of other approaches. If lifelong learning is to make a significant impact on poverty reduction, more approaches are required that address the full range of needs that people who live in poverty may have. This calls for attention to be given to how learning can support, not just the development of human capital, but also social capital and a sense of identity and self-worth.⁴¹
- Damage to the social fabric. There is evidence that high levels of income inequality damage the social fabric more widely. Richard Wilkinson and Kate Pickett's recent book *The Spirit Level* compares societies across the world and demonstrates how modern social problems such as drug and alcohol abuse, violence and obesity are more likely to occur in less equal societies. While the poor are most likely to suffer from these social ills, in a more unequal society these ills have a corrosive effect on the quality of life enjoyed by everyone. The most unequal societies have the lowest levels of trust and highest levels of anxiety, isolation and unhappiness, and are likely to have lower levels of civic and political participation.⁴²

- There are still significant gaps in progression rates between pupils with and without Free School Meals.⁴³

	ESTIMATED % WHO ENTERED HE			
	FSM	Non-FSM	Gap (pp)	All
2005/06	13%	33%	19	30%
2006/07	14%	33%	19	31%
2007/08	15%	33%	18	31%
2008/09	17%	35%	18	33%
2009/10	18%	36%	18	34%

- Data showing progression to HE from the state and independent sector for A level students show a significant disparity across school/college type⁴⁴:

SCHOOL/COLLEGE TYPE	PROGRESSION RATE TO ALL HE				PROGRESSION RATES TO MOST SELECTIVE HE ^c			
	2006/7	2007/8	2008/9	2009/10	2006/7	2007/8	2008/9	2009/10
Independent	85%	83%	82%	87%	63%	63%	62%	65%
Selective state ^d	..	..	89%	89%	..	..	58%	60%
Other state ^e	..	..	68%	69%	..	..	23%	22%
Total state	72%	68%	69%	71%	26%	25%	26%	26%
All	74%	69%	71%	72%	31%	29%	30%	30%
Independent/ State gap (pp)	13	16	13	16	37	38	37	39

^c The most selective are defines as the top third of HEIs when ranked by mean UCAS tariff score from the top three A level grades of entrants

^d Indicators to separately identify selective schools are not available on the matched datasets before 2006/07, so progression rates to HE by age 19 are not available for these schools before 2008/09

^e Ibid

- 92 Local Authorities out of 149 (62%) in 2009/10 had a larger gap between the progression rates for FSM and Non-FSM pupils than the England level gap (of 18 percentage points). The equivalent proportion of authorities in the previous year was 59%.⁴⁵

Life-changing prison education

- Offenders who take prison education are three times less likely to reoffend than those who don't.⁴⁶
- A 1 percentage point rise in the proportion of the working-age population with Level 2 qualifications compared with those with no qualifications would cut the costs of crime annually by £320 million, and, to Level 3, £500 million. A 16% rise in those educated to degree level could save the country £1 billion annually.⁴⁷

- It is estimated that investment in prison education could reduce the total cost of reoffending by 25%.⁴⁸
- There is a strong causal link between both unemployment and crime and educational underachievement and crime. A one per cent reduction in unemployment or educational underachievement is estimated to lead to a one per cent reduction in the crime rate, in relation to property offences.⁴⁹
- 48% of prisoners are at, or below, the level expected of an 11 year old in reading, 65% in numeracy and 82% in writing.⁵⁰
- 47% of prisoners say they have no qualifications. Half of all prisoners do not have the skills required by 96% of jobs and only one in five are able to complete a job application form.⁵¹
- The educational background of children in custody is poor: 86% of boys and 82% of girls surveyed said they had been excluded from school and around half said they were 14 years or younger when they were last in education.⁵²
- The 18-24 group accounts for 26-32 per cent of all registered offences committed annually. Two thirds of male prisoners in the 18-24 age group leaving prison are reconvicted within two years at a cost of £130 million. Over this period, an increasingly large proportion of the general population of the same age is still in education.⁵³
- In 2008-09 an average of £1,631 per prisoner per year was spent on education in custody. This is less than half the average cost of secondary school education at £2,590 per student per year, which many prisoners have missed.⁵⁴

Improving financial literacy

- Education supports learners to be financially literate to make informed judgments and take effective decisions regarding the use and management of money as a potential tool for poverty alleviation. Financial capability supports individuals to manage money, plan ahead, choose products and stay informed.⁵⁵

Facilitating a positive understanding of diversity

- FE and HE bring whole communities together for shared learning activity across traditional boundaries of age, ethnicity and religion.⁵⁶
- FE and HE support vulnerable groups and communities to overcome their disadvantages.⁵⁷
- FE and HE support people to develop the skills and capabilities they need to contribute to the economy and society.⁵⁸
- FE and HE increase the range of cultural and interest groups where people can form new shared identities.⁵⁹

Improving capital – the power of learning to support demographic changes⁶⁰

- Identity capital – to develop and maintain our sense of identity, self confidence, control over our lives, and engagement with other people. This is critical to well-being and mental health, and includes developing powers of creativity and reflection. This sort of learning may be more important when people spend less

of their lives in paid employment, which gives many people a sense of purpose and meaning. Identity capital can be pursued through a wide range of routes, including much ‘non-vocational’ learning.

- Human capital – to develop the skills and knowledge needed to find and retain sustainable and satisfying employment, both paid and unpaid. This may be more complex over a longer working life in a more rapidly changing labour market, and as the numbers of people in the ‘third age’ expand, it will be more important to understand the learning needs of the voluntary labour market; pursued through explicitly ‘vocational’ courses, and by informal workplace learning.
- Social capital – the ability to live as an active member of a community with others at two levels. First, to raise and maintain our families, which becomes more complex with more dual earner families, more frequent divorce, second marriages and second families, and growing caring responsibilities for a larger older generation. Second, to play an active part in the wider society, which becomes more difficult with greater geographical mobility (within, into, and out of the UK) pursued by engaging in learning with others.
- Social capital – we also benefit from our membership in society, which provides the framework in which we live and work. Lifelong learning can help to raise levels of trust, a sense of common identity and respect for difference, and help ensure that the talents of every individual are put to best use.
- Technological changes have the potential to transform learning, and promote new types of social networking, thereby contributing to resilience and well-being. Equally, there are risks of a sharp digital divide, where some groups – particularly older adults – are unable to adapt and apply new technologies in the light of their own circumstances and needs, and may indeed be unable to access new learning opportunities (including information and guidance) that are supported by information and communications technology (ICT). Learning and support need to be targeted, to enable such groups to: access information, guidance and learning support through ICT; gain understanding of the nature and wider role of new technologies; and engage in responsible social networking.
- Graduates of both sexes reported more skill improvement over the past ten years than people with lower qualifications. The effects were particularly marked for mature graduates in verbal, computing and caring skills.⁶¹

THE COST OF UNDERINVESTMENT

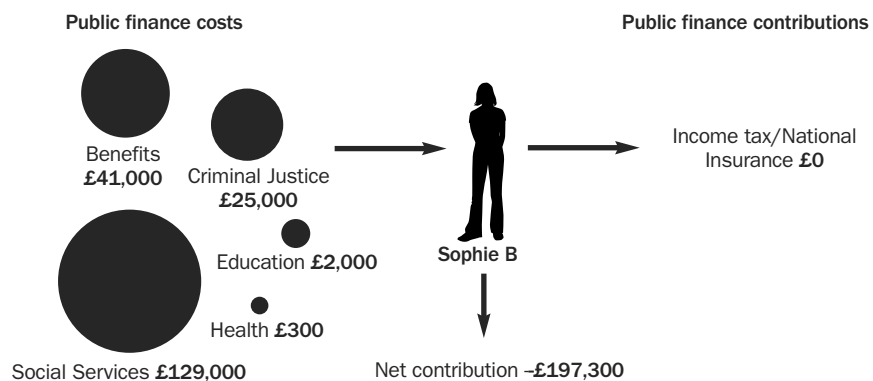
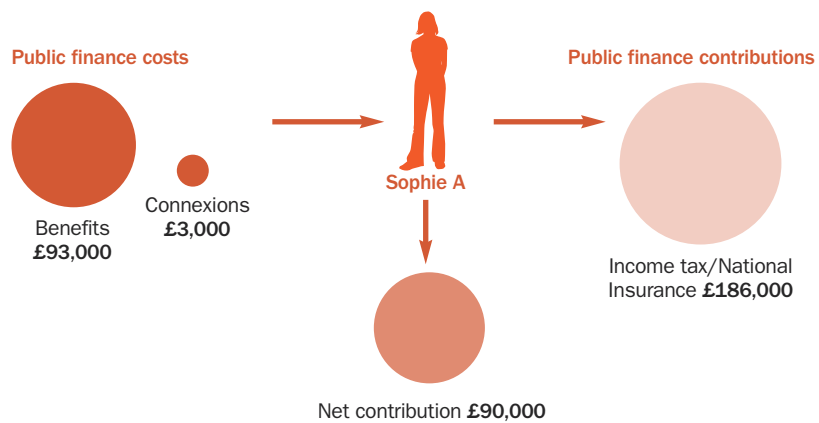
Being NEET is costly

- The Audit Commission conducted research to compare the experiences of young men born in 1970 who experienced being not in education, employment or training (NEET) to the experiences of their peers who had been in education, employment or training throughout their late teens.⁶² The results highlighted that these men were:
 - four times more likely to be out of work
 - five times more likely to have a criminal record
 - six times less likely to have qualifications
 - three times more likely to have depression.

- The Audit Commission estimates that a young person NEET in 2008 will cost an average of £56,000 in public finance costs before retirement age (for example, welfare payments, costs to health and criminal justice services, and loss of tax and national insurance revenue). There will also be £104,000 in opportunity costs (loss to the economy, welfare loss to individuals and their families, and the impact of these costs to the rest of society). The entire 2008 group of young people NEET could cost over £13 billion to the public purse and £22 billion in opportunity costs (Table 1) before they reach retirement age.⁶³
- The York University Department of Social Policy and Social Work and Department of Health Sciences projected the direct and indirect lifetime costs of the 2008 cohort people who were NEET as follows:

	Opportunity costs	Public Finance Costs
Short term (age 16-18)	£2 billion	£2 billion
Medium term (age 19-59)	£20 billion	£11 billion
Long term (age 60 and over)	-	<£1 billion
Total	£22 billion	>£13 billion

- Well-targeted early spending prevents future costs. York University research has shown how well-targeted early spending delivers benefits to individuals and society and prevents future costs. Drawn from a real-life example teenage mother **Sophie A**, getting the right Connexions support becomes a net contributor. **Sophie B**, in similar circumstances without support becomes a net cost to public services.⁶⁴



- The disengagement that accompanies being a young person who is NEET negatively impacts in social terms and those who are disengaged from education and training can cause problems in the community in the form of nuisance and crime. There is also a negative impact on the individual with a tendency towards early criminalisation, drug culture and dependency and teenage pregnancy

The cost of youth unemployment

- The cost of educational underachievement in the UK is estimated as £22 billion for a generation. This calculation is based on the estimated lifetime cost of an individual not having qualifications (£45,000) multiplied by the number of young people in the population who have no qualifications. It takes into account evidence that there are high wage returns for those who stay in education – at least 10 per cent on average.⁶⁵
- In addition to the cost to the individual, there is the cost to the economy of lost productivity. A conservative estimate for this is approximately the same amount per week again. An upper bound figure for lost productivity is £133 million, making the upper estimate for youth unemployment £155 million a week.⁶⁶
- The Prince's Trust has estimated the Exchequer costs of youth unemployment per week.⁶⁷

^f Labour Force Survey (2010)

^g Office for National Statistics (2010)

Government Office Region	Unemployed 20-24 ^f (n)	Maximum lost productivity per week	JSA claimant count 24 and under ^g (n)	JSA total region (£)	Maximum total lost to the economy (£)
Northern Ireland	13,600	3,563,200	19,165	993,705	4,556,905
Scotland	36,200	9,484,400	38,355	1,988,707	11,473,107
Wales	27,500	7,205,000	23,815	1,234,808	8,439,808
England	431,700	113,105,400	344,845	17,880,213	130,985,613
TOTAL	509,100	133,384,200	426,185	22,097,692	155,481,892

- In 2009, the percentage of people aged 16-24 with no qualifications in England, Wales, Scotland and Northern Ireland respectively was 11 per cent, 12.4 per cent, 9.2 per cent and 19.3 per cent.⁶⁸
- The cost of youth unemployment in the UK is estimated in this report in terms of productivity loss and Job Seekers Allowance. There is a cost to the taxpayer of £22 million a week in terms of Jobseeker's Allowance.
- The Total Place project for Coventry, Solihull and Warwickshire (CSW) conducted research which found that whilst Coventry and Warwickshire had one of the lowest NEETs figures regionally of 1178 young people (aged 16-19), and each person experiencing being NEET cost £30,000 per annum, equating to over £35m every year. This figure does not include young people that are 'not known'.

To remain competitive in the global talent pool

- Innovation is a key driver of productivity growth, and therefore economic growth. The OECD's Technology and Industry Outlook (2010), which looks at the contribution of science, technology and innovation to economic growth around the world, highlights the importance of research and development investment – including contributions from tertiary education – to a country's growth prospects.⁷⁰
- Countries with high levels of innovation tend to have, on average, higher proportions of graduates among the general population and a stronger track record of investment in higher education. Reduced investment in higher education risks the UK's ability to compete globally.⁷¹
- Recent research suggests that GDP-related productivity is correlated with higher education attainment rather than purely rates of higher education enrolment. Analysis of OECD data suggests a strongly significant positive correlation between higher education attainment among 25-64 year olds and GDP per head of population in 33 member states.⁷²
- The expansion of higher education in rapidly-developing G20 nations has reduced the share of tertiary graduates from Europe, Japan and the United States in the global talent pool.
- The OECD estimates that if current trends continue, China and India will account for 40% of all young people with a tertiary education in G20 and OECD countries by 2020, while the United States and European Union countries will account for just over a quarter.⁷³
- The OECD argues that the strong demand for employees in 'knowledge economy' fields suggests that the global labour market can continue to absorb the increased supply of highly-education individuals. It is considered that these projections may underestimate the future growth of the global talent pool, because a number of countries are pursuing initiatives to increase tertiary attainment rates even further.⁷⁴
- The OECD references the continued growth of employment in human resources in science and technology (HRST) occupations beyond the rate of total employment in all OECD and G20 countries as a signal that the demand for employees in the knowledge economy sector has not reached its ceiling. Applying this to the overall labour market, the OECD argue that these findings suggest that individuals from increasingly-better educated populations will continue to have good employment outcomes, as long as economies continue to become more knowledge-based.⁷⁵
- The OECD goes on to say that these findings suggest that countries would be "well-advised" to pursue efforts to build their knowledge economies.⁷⁶

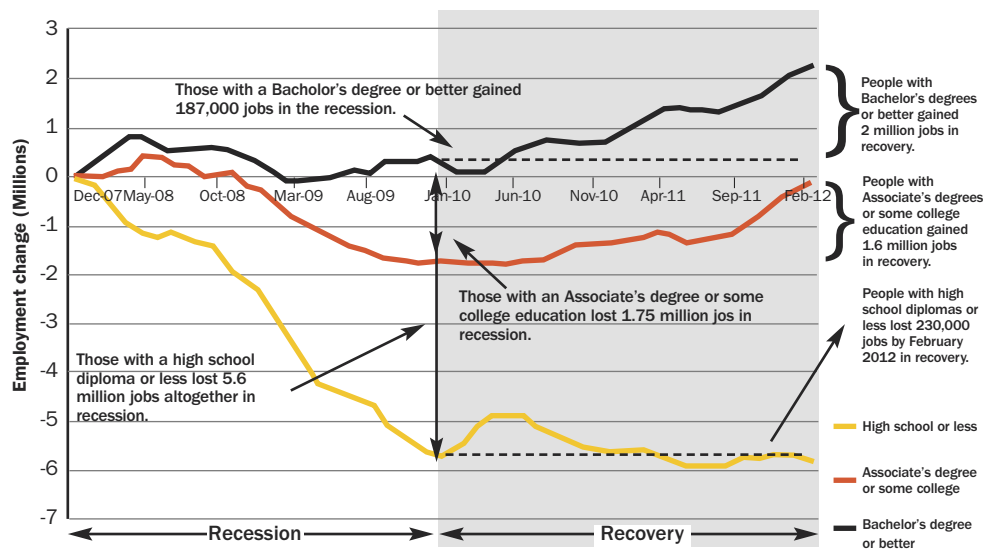
APPENDIX 1

16 August 2012, How the Great Recession Proved, Beyond a Doubt, the Value of a College Degree, Jordan Weissmann

<http://www.theatlantic.com/business/archive/2012/08/how-the-great-recession-proved-beyond-a-doubt-the-value-of-a-college-degree/261225/>

The figures below show an international example of how post-compulsory school education has supported learners to maintain and obtain jobs in the recession. In the USA, whilst employment for those with post compulsory education increased, there was a reduction in employment growth for those without these qualifications, similarly, earnings for college graduates in America were twice those of high-school educated workers.

FIGURE 1: Workers with a high school diploma or less bore the brunt of the recession's job losses. Job gains in the recovery are confined to those with education beyond high school.



Source: Author's estimate of the Current Population Survey data (2007-2012.) Employment includes all workers aged 18 and older. Note: The monthly employment numbers are seasonally adjusted using the US Census Bureau X-12 procedure and smoothed using four-month moving averages. The graph represents the total employment losses by education since the beginning of the recession in December 2007 to January 2012 and employment gains in recovery from January 2012 to February 2012.

FIGURE 5: Employment growth in the past two decades has been entirely through increases in the number of workers with some post-secondary education, while employment for those with a high school diploma or less has declined.

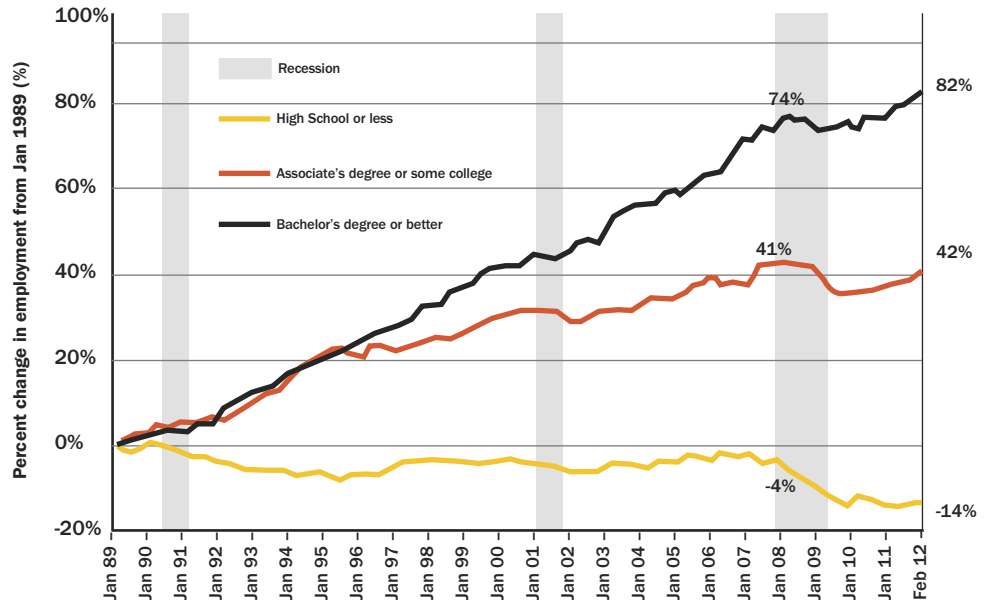
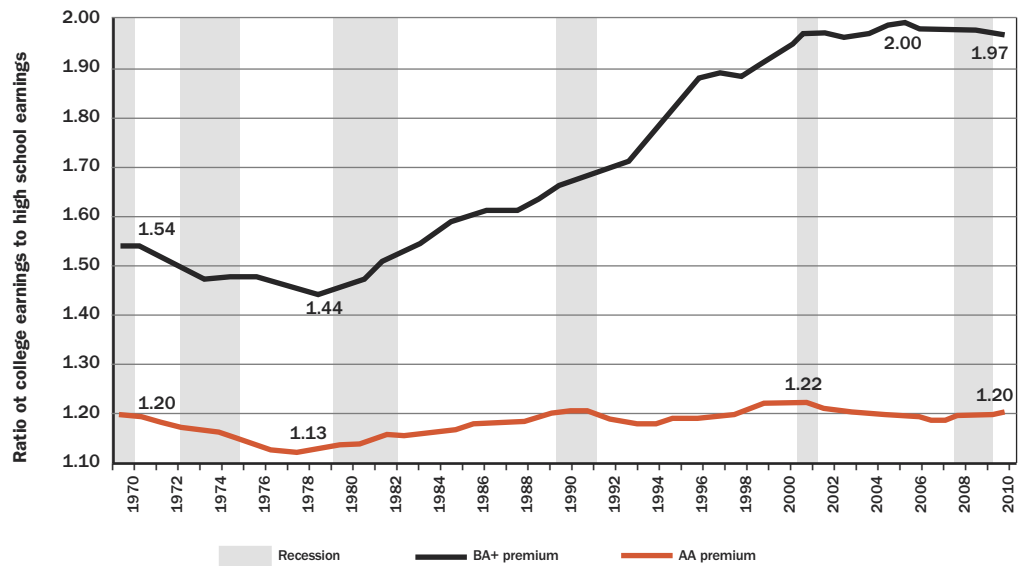


FIGURE 7: Earnings of four-year college-educated workers remain nearly twice those of high school educated workers



Notes

- ¹ Ministerial foreword, (1998), (DfEE 1998:7)
- ² AoC, (2011), College Key Facts, available at <http://www.aoc.co.uk/en/research/college-key-facts.cfm>
- ³ <http://news.bis.gov.uk/Press-Releases/Past-Olympians-and-pilot-of-world-s-fastest-car-join-forces-at-showcase-for-best-of-British-education-67dfd.aspx>
- ⁴ Table A10.1, OECD, (2012), Education at a Glance, available at: http://www.oecd.org/edu/EAG%202012_e-book_EN_200912.pdf
- ⁵ Kelly, U., McLellan, D., McNicol, I. (2007) Unpublished paper: The Economic Impact of the Expenditure of the English Further Education Sector, University of Strathclyde
- ⁶ Kelly, U., McLellan, D., McNicol, I. (2007) Unpublished paper: The Economic Impact of the Expenditure of the English Further Education Sector, University of Strathclyde
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