

# Appendix: The impact of adult literacy and numeracy research based on the 1970 British Cohort Study

## *Examples of impact*

1. England.....	2
1.1 Head of Skills for Life Strategy Unit .....	2
1.2 Shadow Minister for Lifelong Learning.....	2
1.3 House of Commons Select Committee.....	2
1.4 House of Commons debate .....	3
1.5 Westminster government documents .....	3
1.6 Government regulations .....	4
1.7 Government-commissioned reports.....	5
2. Scotland.....	5
2.1 UK National Commission for UNESCO Scotland.....	5
2.2 NHS Scotland.....	5
2.3 Strategic guidance from Scottish Government.....	6
3. Wales.....	6
3.1 Welsh Assembly Government documents .....	6
3.2 Independent Review of Further Education.....	6
3.3 Welsh Assembly research paper .....	6
4. International .....	7
4.1 European Commission .....	7
4.2 OECD.....	7
4.3 New Zealand .....	7
4.4 Australia .....	8
4.5 Canada .....	9
4.6 Ireland.....	9
5. Local government .....	10
5.1 Gateshead .....	10
5.2 Winchester and Surrey.....	10
5.3 Havering.....	10
6. Skills and business organisations.....	10
6.1 UK Commission for Employment and Skills.....	10
6.2 Business in the Community .....	11
6.3 London Strategic Action Plan .....	11
7. Think tanks and charities.....	12
7.1 Pearson Think Tank .....	12
7.2 Joseph Rowntree Foundation.....	12
7.3 Thames Reach.....	12
7.4 New Philanthropy Capital .....	13
7.5 KPMG .....	13
7.6 National Literacy Trust .....	13
7.7 Beanstalk .....	14
7.8 Smith Institute and Centre for Social Justice .....	14
8. Education organisations .....	14
8.1 NIACE .....	14
8.2 CFBT.....	15
9. Media reports.....	16

## 1. England

### 1.1 Head of Skills for Life Strategy Unit

Barry Brooks, who led the Skills for Life Strategy Unit at the Department for Education, also highlighted the researchers' findings in a report he wrote for the European Commission. This document, *An agenda for new skills for jobs & youth in the European Union*, states:

*"In Bynner and Parsons' analysis of research drawn from the UK's National Cohort Study they were able to identify what they described as a 'trajectory of disadvantage'. This research, entitled 'Illuminating disadvantage', looked at the impact on the life chances of men and women with low and no skills. The litany of social isolation and the cycle of under-achievement, especially for women and their families ... highlights a reality that is at once chilling and motivating. 'Chilling', because these data confirm our worst fears about the destruction created by this cycle of disadvantage but also 'motivating', because the research suggests that the future does not have to be as irrevocably predetermined as the data suggest. There are still opportunities for this precious human capital to be rehabilitated or rescued as there are many ages and stages at which this cycle can be broken and many levers and drivers that secure sustainable change."*<sup>1</sup>

Brooks is now Group Strategy Director of Tribal, the international education technology and services provider.

### 1.2 Shadow Minister for Lifelong Learning

In his *Talisman* article<sup>2</sup>, John Hayes, then Shadow Minister for Lifelong Learning, wrote:

*"Adult education should also play a central role in delivering social justice. The children of parents with literacy skills below Entry Level 2 are demonstrably more likely to be poor, unemployed and in poor health when they, in turn, reach adulthood. The cycle of deprivation can be broken if more adults in poorer households can be persuaded back into education. We are unlikely to achieve this objective if we see the virtues of adult learning in solely utilitarian terms. We must also focus on the value of education in providing individuals with a sense of worth."*

### 1.3 House of Commons Select Committee

Alan Wells, Director of the Basic Skills Agency from 1978 to 2006, referred to the researchers' findings in his submission to the House of Commons Education and Skills Select Committee inquiry into post-16 skills in February 2007.

*"...the focus on Level 2 means that providers have to target adults able to reach the level required fairly quickly to the detriment of adults with rather more serious basic skills deficits. Yet, evidence from Bynner and Parsons suggests that disadvantage is heavily focused on adults with the very poorest basic skills. What needs to be done? In the short-term, the Skills for Life strategy needs to be refocused so that it is genuinely concerned with improving adult literacy and numeracy skills among adults. This means setting as the target for the strategy, those adults who perform below Level 1 in literacy and below Entry Level 3 in numeracy. Whilst it may be desirable to have a Level 2 target, this should be separate from a target focused on improving adult literacy and numeracy skills."*<sup>3</sup>

---

<sup>1</sup> Document available on request from the Centre for Longitudinal Studies

<sup>2</sup> "Lifelong learning will bring fulfilment for young and old", *Talisman*, Issue 56.

<sup>3</sup> Memorandum from Alan Wells

<http://www.publications.parliament.uk/pa/cm200607/cmselect/cmmeduski/memo/333/ucm302.htm>

In its evidence to the Select Committee's post-16 inquiry the National Institute of Adult Continuing Education emphasised the same point:

*"...NIACE has strongly supported the emphasis given to Skills for Life as a focus for improving levels of literacy, language and numeracy but believe that insufficient attention is paid to those at pre-entry and entry levels who would have difficulty in achieving Level 1 or 2 quickly. Research by Bynner and Parsons (New light on literacy and numeracy, NRDC, November 2006) suggests that it is at this level, rather than where the national tests are set, which would be the most effective way to break a cycle of intergenerational poverty and have greatest synergy with the provisions, such as family learning and Sure Start. Bynner and Parsons' work also suggests greater attention should be given to intensive provision for those in greatest need. This is particularly important in a target-driven approach where focus, perhaps inevitably, drifts towards those people with the shortest journey to achieve the target."*<sup>4</sup>

The Education and Skills Committee appear to have found the evidence persuasive as their final report<sup>5</sup>, published in July 2007, contains the following conclusions:

*"We believe the Government's promise to maintain current levels of expenditure on personal and community development learning, and on other 'first-step', non-qualification-bearing provision, falls far short of what is required and will do nothing to redress the recent substantial fall in the number of adults learning. We are particularly concerned about the potential negative impact on the most disadvantaged individuals, including disabled people and those with the very lowest level of skills."*

#### **1.4 House of Commons debate**

Robin Walker, Conservative MP for Worcester, made the following reference to Bynner and Parsons' work during a House of Commons debate on October 10, 2013:

*"According to the National Research and Development Centre for Adult Literacy and Numeracy, adults with poor numeracy are two and a half times more likely to report having a long-standing illness or disability and are roughly twice as likely to report several symptoms of depression. Adults with poor numeracy are more than twice as likely to have had their first child while still in their teens. Dealing with low levels of numeracy can therefore help to reduce welfare dependency, crime and mental health costs ... We need to empower employers to work more closely with target groups in the adult population, as well as with school-age children to show the relevance of numeracy and literacy skills in the workplace and the opportunities they can bring."*<sup>6</sup>

#### **1.5 Westminster government documents**

Among the other government documents that make explicit references to one or more of Bynner and Parsons' analyses of the 1970 cohort data are:

---

<sup>4</sup> NIACE also referred to this finding in the memorandum that it submitted to the House of Commons Education and Skills Committee inquiry into further education in November 2005.

<sup>5</sup> <http://www.publications.parliament.uk/pa/cm200607/cmselect/cmmeduski/333/333.pdf>

<sup>6</sup> 10 Oct 2013 : Column 336

<http://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm131010/debtext/131010-0002.htm>

***Working our way to better mental health: a framework for action*** (2009)<sup>7</sup>

This policy document was presented to Parliament by the Secretaries of State of the Department for Work and Pensions and the Department of Health. It cites *New light on literacy and numeracy* and states:

*“The factors which place people at a social disadvantage, such as poor educational attainment, drug and alcohol abuse, homelessness or a history of offending, also increase vulnerability to poor mental health.”*

***Life chances: supporting people to get on in the labour market*** (2008)<sup>8</sup>

*New light on literacy and numeracy* is also referred to in this discussion paper, a joint publication from the Cabinet Office Strategy Unit, the Department for Innovation, Universities and Skills, and the Department for Work and Pensions. This paper, which was produced to stimulate a debate about what works best in supporting people to “get into work and get on in work”, refers readers to Bynner and Parsons’ research after each of the following statements:

*“Children of parents with only very basic numeracy (Entry Level 2) are twice as likely to be in the bottom 20% at age 5 as those whose parents have Level 2 numeracy.”*

*“People who manage to improve their skills in adulthood are less likely to be disengaged from democratic processes.”*

***Improving services, improving lives*** (2005)<sup>9</sup>

This Social Exclusion Unit report was published by the Office of the Deputy Prime Minister and carries a foreword by the then prime minister, Tony Blair. It sets out the Government’s understanding of the key issues that have an impact on the effectiveness of mainstream public services for disadvantaged adults. It cites *New light on literacy and numeracy* four times in the following statements:

*“Disadvantage decreases in line with levels of literacy. It becomes particularly intense among people – particularly men – with the lowest levels of literacy (Entry Level 2 and below). This group is much more likely to be unemployed and to face poor health and isolation.”*

*“People with the lowest levels of literacy are also much more likely to be psychologically unprepared for work or applying for work.”*

*“People with the lowest levels of skills, especially men, are also more likely to lead isolated lives and less likely to have spouses or partners.”*

## **1.6 Government regulations**

***The Jobseeker’s Allowance (Employment, Skills and Enterprise Scheme) Regulations*** (2011)<sup>10</sup>

Presented to Parliament by the Secretary of State for Work and Pensions, these regulations help to provide the legislative framework for a package of measures designed to help claimants find work. The ‘policy background’ section of this document emphasises that skills

---

<sup>7</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/228874/7756.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228874/7756.pdf)

<sup>8</sup>[http://www.bis.gov.uk/assets/biscore/corporate/migratedD/ec\\_group/5-08-SK\\_hc](http://www.bis.gov.uk/assets/biscore/corporate/migratedD/ec_group/5-08-SK_hc)

<sup>9</sup><http://www.westsussexhealthlibraries.nhs.uk/edocs/improvingservices-improvinglives.pdf>

<sup>10</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/228997/8058.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228997/8058.pdf)

play an important role in improving labour market outcomes, both for individuals and society, and points to research that bears this out. It adds:

*“Bynner and Parsons (2006) also showed that adults who improved their numeracy skills between ages 21 and 34 were more likely to have their own home, savings and less likely to be on benefits than those who did not improve their skills.”*

## 1.7 Government-commissioned reports

A state-of-science review on **Dyscalculia**<sup>11</sup> [difficulty in understanding arithmetic] also makes several references to the researchers' findings. This 2008 report by Professor Brian Butterworth of University College, London, was produced as part of the Foresight series, which uses the latest scientific evidence to analyse complex issues and help policy-makers make decisions affecting the nation's future. It contains the following passage which has three references to *Does numeracy matter more?*

*“Men aged 30, with poor numeracy, are more than two-and-a-half times as likely to be unemployed, more than three-and-a-half times as likely to be depressed, and nearly twice as likely to be arrested. Women are similarly affected. Compared with their numerically-competent peers, fewer than half are in employment at 30 years, fewer than half are home owners, and twice as many are in poor physical health. When low numeracy is combined with low literacy, the situation for individuals is worse<sup>11</sup>.”*

## 2. Scotland

### 2.1 UK National Commission for UNESCO Scotland

The researchers' findings have also been highlighted in ***Reaching the marginalised*** (2010)<sup>12</sup>, a report published by the UK National Commission for UNESCO Scotland. This report, which provides a summary of an Education for All event held at the Scottish Parliament in April 2010, states:

*“Living in poverty as a child and as an adult appears to have the biggest impact on poor literacy. Parsons and Bynner's (2008) analysis of the Scottish members of the 1970 British Cohort Study found that people with literacy difficulties as adults had a relatively disadvantaged home life in childhood. They were economically poor, had low education levels and little educational support from their parents and, as a result, were less likely to have had help with reading and numbers at school. In addition this group had mainly left full-time education without qualifications and had not accessed further learning opportunities.”*

### 2.2 NHS Scotland

Another 2010 publication – published by NHS Health Scotland – also refers to Parsons and Bynner's report for the Scottish Government. ***Dimensions of diversity: Population differences and health improvement opportunities***<sup>13</sup> notes:

*“According to Scottish data from the 2004 survey of the 1970 British Cohort Study, individuals with the poorest grasp of literacy and numeracy in adulthood are likely to have had a relatively disadvantaged home life in childhood, measured by various socio-economic indicators. This adds to the many reasons why a focus on improving life circumstances in*

---

<sup>11</sup> [http://www.mathematicalbrain.com/pdf/2008BB\\_3673.PDF](http://www.mathematicalbrain.com/pdf/2008BB_3673.PDF)

<sup>12</sup> <http://www.unesco.org.uk/uploads/EFA%20GMR%20Reaching%20the%20Marginalised%20Scotland%20Seminar%20report.pdf>

<sup>13</sup> <http://www.scotpho.org.uk/publications/reports-and-papers/484-dimensions-of-diversity-population-differences-and-health-improvement-opportunities->

*childhood is important for the future health and wellbeing of the population. This must include parents, perhaps especially mothers, as well as children.”*

Another health policy document that refers to their research is the **NHS Tayside Health Equity Strategy: Population Profile** (2009)<sup>14</sup>. It cites *New light on literacy and numeracy* (2006) in the following passage.

*“In Scotland, adults with low literacy have been found to be more likely to have long standing illness (44% low literacy vs. 25% higher literacy), have higher levels of smoking and heavy drinking, and more than 1 in 4 had experienced symptoms of depression, twice the rate of those with higher literacy.”*

### 2.3 Strategic guidance from Scottish Government

Strategic guidance that the Edinburgh government issued in 2011, **Adult literacies in Scotland 2020**<sup>15</sup>, contains a very similar message:

*“In New light on adult literacy and numeracy in Scotland (2008), Parsons and Bynner report that adults with low literacies levels are more likely to smoke, consume more units of alcohol and be more likely to experience symptoms of depression.”*

## 3. Wales

### 3.1 Welsh Assembly Government documents

Various Welsh Assembly Government policy documents draw attention to Bynner and Parsons’ research. For example, **Evaluation of the impact of the Basic Skills Strategy for Wales** (2007)<sup>16</sup> cites *New light on literacy and numeracy*.

### 3.2 Independent Review of Further Education

**Promise and performance** (2007)<sup>17</sup>, the report of the Independent Review of the Mission and Purpose of Further Education in Wales, also mentions their research. It notes:

*“A recent longitudinal research study [New light on literacy and numeracy] of over 7,000 adults across Britain showed that Wales is lagging behind England and Scotland.”*

### 3.3 Welsh Assembly research paper

More recently, a Welsh Assembly research paper, **Young people not in education, employment or training** (2013)<sup>18</sup>, has reminded its readers that:

*“Analysis of the 1970 birth cohort carried out by John Bynner and Samantha Parsons in 2002<sup>19</sup> showed that young people with no qualifications were six times more likely to not be in education, employment or training than those with qualifications. Bynner and Parsons also found that young people from lower socio-economic groups are at significant risk.”*

---

<sup>14</sup><http://www.thpc.scot.nhs.uk/PDFs/Directorate%20Documents/091009%20POPULATION%20PROFI LE.pdf>

<sup>15</sup><http://www.scotland.gov.uk/Resource/Doc/339854/0112382.pdf>

<sup>16</sup><http://www.learningobservatory.com/uploads/publications/1103.pdf>

<sup>17</sup><http://funding-model.pbworks.com/f/The+Webb+Review.pdf>

<sup>18</sup><http://www.assemblywales.org/13-062.pdf>

<sup>19</sup> This study did not include literacy or numeracy scores. It concentrated on poor reading and maths skills at age 10 and qualifications at age 16.

## 4. International

### 4.1 European Commission

The **Final report: EU high level group of experts on literacy** (2012)<sup>20</sup>, which makes many references to Bynner and Parsons' work, was requested by Androulla Vassiliou, European Commissioner for Education. She is concerned that many of the 73 million adults in Europe with low qualifications have insufficient literacy to cope with the daily requirements of personal, social and economic life.

The group, chaired by Princess Laurentien of the Netherlands, was charged with examining the most effective and efficient ways to improve reading skills in Europe – among children and adults. Princess Laurentien described the report as “a wake-up call about the literacy crisis that affects every country in Europe” and said she hoped it would “help kick-start an ambitious, comprehensive and structural approach within and across EU Member States to prevent and reduce literacy problems”.

The opening page of the group's final report refers to *Illuminating disadvantage* (2007) no fewer than three times and provides this summary of their findings:

*“People with low literacy are less likely to finish school, more likely to be unemployed, more likely to be on social benefits, and more likely to suffer from poor health (e.g. more likely to smoke, less likely to exercise). Poor literacy does not just thwart education and employment, it thwarts aspiration and ambition. Children of adults with poor literacy are more likely to struggle with literacy themselves, and less likely to do well in school. More broadly, poor literacy limits individuals' capabilities and civic participation, increases poverty, hinders innovation, reduces productivity and holds back economic growth.”*

### 4.2 OECD

Bynner and Parsons' BCS70-based research is also referred to in several reports from the influential Organisation for Economic Co-operation and Development, which represents 34 countries. For example, a 2006 background report that the OECD commissioned on **Adult basic skills and formative assessment practices in England (2006)**<sup>21</sup> repeats the statement by the Chief Inspector for Adult Learning that was referred to in the main section of this case study:

*“A longitudinal study involving 10,000 people born in 1970 conducted for the National Research and Development Centre for Adult Literacy and Numeracy has shown that real disadvantage is concentrated among those whose capabilities are at or below Entry Level 2.”*

### 4.3 New Zealand

*Illuminating disadvantage* is also cited in a report published by New Zealand's Department of Labour, **Workers with low literacy or numeracy skills: characteristics, jobs, and education and training patterns** (2010)<sup>22</sup>. The Department commissioned the report to help identify the industries that have the greatest literacy and numeracy training needs. It acknowledged, however, that there are social – as well as economic -- reasons for learning more about adults with low levels of literacy and numeracy, and referred readers to *Illuminating disadvantage*.

---

<sup>20</sup> [http://ec.europa.eu/education/policy/school/doc/literacy-report\\_en.pdf](http://ec.europa.eu/education/policy/school/doc/literacy-report_en.pdf)

<sup>21</sup> <http://www.oecd.org/unitedkingdom/40015467.pdf>

<sup>22</sup> <http://www.dol.govt.nz/publications/research/adult-literacy/adult-literacy.pdf>



*“Adults with very low levels of these skills have poorer outcomes than other adults in many domains of life, such as educational participation and achievement, family relationships and incomes.”*

*Illuminating disadvantage* is also cited in ***Unlocking Auckland’s potential: Adult literacy and numeracy skills in the new Auckland*** (2010)<sup>23</sup>. This report states:

*“People with very low levels of literacy and numeracy are more likely to have negative outcomes in life such as poor labour market experiences and prospects, poor material and financial circumstances, poor health prospects and lack of social and political participation. About 58% of those with very low literacy in a major longitudinal study in the UK also had a mother with very low educational achievement. Conversely, having a mother with tertiary qualifications has a positive impact on family income and children’s competencies.”*

#### **4.4 Australia**

Bynner and Parsons’ work is cited in a range of policy documents published by different arms of the Australian government and the country’s business community.

For example, the Government’s Productivity Commission refers to *New light on literacy and numeracy* in its 2012 report on vocational education and training, ***Impacts of Council of Australian Governments’ reforms: Business regulation and VET***<sup>24</sup>.

*“Better language, literacy and numeracy skills have also been linked with improved health outcomes. Bynner and Parsons (2006) reported a correlation between poor basic skills and poor physical health and mental wellbeing. Poor skills were related to poor health-related practices, such as lack of exercise and smoking. It was also concluded that improving literacy levels might lead to better health literacy.”*

*New light on literacy and numeracy* is also cited in ***No more excuses***, a 2011 report<sup>25</sup> by Australia’s Industry Skills Councils. This report is described as “an industry response to the language, literacy and numeracy challenge”.

*Does numeracy matter more?* is cited in two responses to an important discussion paper produced by the Australian Workforce and Productivity Agency, *Future focus: Australia’s skills and workforce development needs* (2012).

The first response, from the National VET Equity Advisory Council, notes:

*“... women with low numeracy skills were found to be especially vulnerable to exclusion from the clerical and sales jobs to which they had aspired. For women, while the impact of low literacy and low numeracy is substantial, low numeracy is found to have the greatest negative effect, even when it is combined with competent literacy (Bynner and Parsons, 2006). The variation in employment outcomes between the disadvantaged groups, on the*

---

<sup>23</sup> [http://www.cometauckland.org.nz/webfiles/CometNZ/webpages/images/43744/Image\\_035\\_Unlockin\\_g\\_Auckland-35576.pdf](http://www.cometauckland.org.nz/webfiles/CometNZ/webpages/images/43744/Image_035_Unlockin_g_Auckland-35576.pdf)

<sup>24</sup> [http://www.pc.gov.au/\\_data/assets/pdf\\_file/0003/116742/coag-reform-vet.pdf](http://www.pc.gov.au/_data/assets/pdf_file/0003/116742/coag-reform-vet.pdf)

<sup>25</sup> [http://www.isc.org.au/pdf/NoMoreExcuses\\_FINAL%20single%20page.pdf](http://www.isc.org.au/pdf/NoMoreExcuses_FINAL%20single%20page.pdf)



*basis of low numeracy skills, suggests that foundation skill programs must be targeted and tailored to meet the needs of disadvantaged cohorts, including for women.*<sup>26</sup>

The second response, prepared by the Australian Council for Educational Research, cites Bynner and Parsons' research and states:

*“One critical issue for effective delivery of VET and workforce learning and productivity relates to numeracy. Research shows numeracy is at least, if not more, important as literacy in predicting success for training, workplace and general life success .”*<sup>27</sup>

#### 4.5 Canada

The Premier's Technology Council in British Columbia drew on *Does numeracy matter more?* while preparing its 2010 report, ***A vision for 21st century education***<sup>28</sup>. The Council, which advises the provincial premier on technology-related issues, bases the following two passages on Bynner and Parsons' findings:

*“Poor schools make it difficult to function effectively in all areas of modern life, particularly for women. Despite the growing importance that employers place on numeracy, it is believed to be undervalued. There remains an inherent assumption among adults that being able to deal with numbers and graphics is not as important as being able to read and write competently.”*

*“It should be noted that numeracy poses particular problems for employability because if numeracy skills are not used in the workplace, they are likely to decline. This is less applicable to literacy as there is more frequent exposure to written communications.”*

#### 4.6 Ireland

An Irish government review of adult literacy provision published in 2013<sup>29</sup> refers to *Illuminating disadvantage* and *New light on literacy and numeracy*. This report, published by the Department of Education and Skills, states:

*“Bynner and Parsons' research based on a longitudinal study of adults with very low literacy and numeracy ... highlights important issues in relation to advertising of services. The research found that there is a continuing low self-awareness of literacy and numeracy difficulties amongst those who were found through assessment to need support. The research found that by asking questions about highly specific difficulties to the whole sample and not, as in the past, just to those who acknowledged difficulties, the proportions increased. Bynner and Parsons underline that what is particularly significant in policy terms is that once the awareness is present, interest in improvement tends to follow.”*

---

<sup>26</sup> <http://www.awpa.gov.au/our-work/Workforce%20development/national-workforce-development-strategy/2013-workforce-development-strategy/Documents/2013%20Future%20Focus%20Stakeholder%20Submissions/NVEAC.pdf>

<sup>27</sup> <http://www.awpa.gov.au/our-work/Workforce%20development/national-workforce-development-strategy/2013-workforce-development-strategy/Documents/2013%20Future%20Focus%20Stakeholder%20Submissions/ACER.pdf>

<sup>28</sup> [http://www.gov.bc.ca/premier/attachments/PTC\\_vision%20for\\_education.pdf](http://www.gov.bc.ca/premier/attachments/PTC_vision%20for_education.pdf)

<sup>29</sup> <http://www.education.ie/en/Publications/Policy-Reports/Review-of-ALCES-funded-Adult-Literacy-Provision.pdf>

## 5. Local government

England's local authorities have also made extensive use of the researchers' findings.

### 5.1 Gateshead

*New light on literacy and numeracy*, is cited in **A family learning strategy for Gateshead (2007-10)**. This Gateshead Council publication points out that the researchers' work has shown that children whose parents have difficulties with literacy and numeracy are also more likely to underachieve at school. It then adds:

*“Family learning, in particular family literacy, language and numeracy, raises the skills of parents and children and increases parents' support for their children's literacy, language and numeracy development.”*

### 5.2 Winchester and Surrey

*New light on literacy and numeracy* is also referred to in **Equality and diversity**, a briefing document that Winchester City Council published in 2012, and a Surrey Council policy document, **Addressing inequalities**. The Surrey document<sup>30</sup> states:

*“Research has found that those with poor basic skills are less likely to be interested in politics, have higher levels of political cynicism and are less likely to vote or to have contact with the government.”*

### 5.3 Havering

The London Borough of Havering also drew on two of Bynner and Parsons' BCS70-based studies while drafting its literacy policy. The resulting strategy document<sup>31</sup> states:

*“Literacy skills play an important part in terms of employability and wages. Bynner and Parsons (2006) [New light on literacy and numeracy] found that men and women with poor literacy had the lowest levels of full-time employment at the age of 30.”*

*“.....Research conducted in 2007 [Illuminating disadvantage] on the profile of adults with entry level literacy or numeracy highlighted that those who did not like school were far more likely to have low literacy skills at age 34.”*

## 6. Skills and business organisations

### 6.1 UK Commission for Employment and Skills

***The role of skills from worklessness to sustainable employment with progression (2011)***<sup>32</sup>

This report was published by the UK Commission for Employment and Skills, a social partnership representing large and small employers, trade unions and the voluntary sector. It is specifically tasked to “advise the highest levels of Government on policies and delivery that will contribute to increased jobs, skills and productivity”. Its 2011 report devotes a lengthy passage to *Illuminating disadvantage*:

---

<sup>30</sup> <http://mycouncil.surreycc.gov.uk/Data/Cabinet/20120327/Agenda/item%2008%20-%20Annex%202%20-%20EIA%20-%20Commitment%20to%20Public%20Involvement.doc.pdf>

<sup>31</sup> <http://democracy.havering.gov.uk/documents/s7943/literacy%20strategy%20appendix.pdf>

<sup>32</sup> <https://www.gov.uk/government/publications/unemployment-to-employment-the-role-of-skills>

*“Parsons and Bynner (2007) use the British Cohort Study (BCS) to cast particular light on the contribution of basic skills gaps as a causal factor in unemployment. Though their study does not generate statistical analyses of causality, it does identify adults at age 34 in the BCS with basic skills in numeracy and literacy below Level 1 (GCSE grades D-G) using a specially designed test. They then use the BCS to track their current and life-time experiences. What this shows is that evidence of the emergence of basic skills needs was available at an early age and that frequently little was done to correct this within the education system. The cohort with basic skills lower than Level 1 often left the education system early, had greater prevalence of unemployment (particularly for those with low basic literacy skills) and tended to work in lower occupational groups that on average attract lower wages. Indeed while in the overall BCS 1970 cohort sample only one per cent had never worked, this rose to more than 11 per cent for those with literacy skills below Entry Level 2.*

*“In addition, those identified with lower basic skills at age 34 tended also to be less likely to be engaged in work practices (such as using a computer) which might act as a proxy indicator for the potential for sustainability of their employment ... Interestingly, people with low basic skills at age 34 were also more likely to have spent a greater proportion of their working lives as sick, and women spent more time at home caring for children than did others in the sample with basic skills above Level 1.”*

## **6.2 Business in the community**

### ***Time to read – A ten year review*** (2009)<sup>33</sup>

Commissioned by Business in the Community, Northern Ireland, this report cites *Illuminating disadvantage* and discusses its findings at some length:

*“Parsons and Brynner (2007)... found a strong correlation between literacy difficulties and social disadvantage. Those with the ‘poorest grasp of literacy or numeracy, particularly literacy, had a relatively disadvantaged home life in childhood, both economically and in terms of ... educational support offered by parents’ ... were less likely to have had access to preschool educational experiences and were already performing less well in cognitive assessments as early as five years of age. By the age of ten, the children were likely to have fallen further behind, becoming disillusioned with school and wanting to leave at the first opportunity. Stemming from this, they were most likely to have left full-time education at the earliest opportunity with no qualifications. Subsequently, they were found to be four times more likely to hold negative views of the value of education for future employment opportunities and often had lower career aspirations. Ongoing negative consequences are likely to be experienced throughout life, in the labour market and at home, especially for men.”*

## **6.3 London Strategic Action Plan**

***The London Strategic Action Plan for Skills for Life in London: Summary of evidence for literacy, numeracy and key skills*** (2006)<sup>34</sup> makes several mentions of Bynner and Parsons’ research and notes their key finding on the concentration of disadvantage at the lowest levels of literacy and numeracy. This report was commissioned by London’s Framework for Regional Employment and Skills Action Flagship for Skills for Life group. It states:

---

<sup>33</sup> <http://www.effectiveservices.org/images/uploads/2009%20Time%20to%20Read%20A%20Ten%20Year%20Review.pdf>

<sup>34</sup> <http://www.jhconsulting.org.uk/upload/Evidence%20Base%20final%20-%20Literacy,%20numeracy%20&%20key%20skills.pdf>

“...the NRDC highlighted how much disadvantage increases ‘as you go down the various steps on the scale of illiteracy’. Whilst the decline in advantage from Level 2 to Entry Level 3 follows a smooth gradient, ‘fortunes plummet’ for people in the next band down, Entry Level 2.”

## 7. Think tanks and charities

### 7.1 Pearson Think Tank

***Rational numbers: Investigating compulsion for mathematics study to 18*** (2012)<sup>35</sup>  
This study by the Pearson Think Tank refers to *Does numeracy matter more?*

“Parsons and Bynner found that numeracy skills were more important for women than for men, irrespective of their standard of literacy. Women with poor numeracy were less likely to be in a full-time job at the age of 30, less likely to have an interest in politics and more likely to feel that they lacked control over their lives. If they were in work, they were more likely to be in an unskilled or semi-skilled job. Poor numeracy rather than literacy was found to be a predictor of women being part of a non-working household.”

### 7.2 Joseph Rowntree Foundation

***Skills, employment, income inequality and poverty: theory, evidence and an estimation framework*** (2012)<sup>36</sup>

This paper from the Joseph Rowntree Foundation investigates the likely impact on income inequality and poverty of improving the skills of the UK population. The paper was commissioned from the Institute for Social and Economic Research, University of Essex. It cites *New light on literacy and numeracy*.

### 7.3 Thames Reach

***Turning the key: Portraits of low literacy amongst people with experience of homelessness*** (2010)<sup>37</sup>

Published by Thames Reach, a London charity that helps homeless and vulnerable people, this report makes a number of extended references to *New light on literacy and numeracy* and *Illuminating disadvantage*. In his foreword, Jeremy Swain, the charity’s chief executive, describes *Turning the Key* as “a vital piece of research that will change the way we work”. The report itself states:

“The 1970 British Cohort Study has been a vital source of information about low literacy and its socio-economic outcomes in the UK ... In their most recent update on the lives of the 1970 cohort at age 34, Parsons and Bynner describe ‘trajectories of disadvantage’ beginning in childhood.... The 1970 British Cohort study concludes that the relationship between skills and employment is more pronounced in women than in men. Girls leaving school with low literacy often became mothers soon after and tended not to be working at this stage. Marital breakdown was more common amongst the 34-year-old men with entry level skills. But, without the means to provide for partners or families, just under half had never married.”

---

<sup>35</sup> <http://thepearsonthinktank.com/2012/rational-numbers-investigating-compulsion-for-mathematics-study-to-18/>

<sup>36</sup> <http://www.jrf.org.uk/publications/skills-employment-theory-evidence>

<sup>37</sup> <http://www.thamesreach.org.uk/EasySiteWeb/getresource.axd?AssetID=17662&type=full&servicetype=Attach>

## 7.4 New Philanthropy Capital

### **Count me in: improving numeracy in England** (2010)<sup>38</sup>

This guide for charities and funders produced by New Philanthropy Capital cites both *Illuminating disadvantage* and *Does numeracy matter more?* in the following passage:

*“People with poor literacy and numeracy skills often have a relatively disadvantaged home life when growing up, and it is likely that this background is an underlying cause both of poor numeracy and of other problems that may occur later in life. Yet the association between poor numeracy and other negative outcomes is striking. For example, people with poor numeracy skills are more than twice as likely to be unemployed as those who are competent at numeracy. And people with poor numeracy but competent literacy skills are just as likely to have left school at 16 as those with both poor numeracy and literacy skills, implying that numeracy alone plays a crucial role in influencing when a person leaves school.”*

A more recent report from New Philanthropy Capital, *Inspiring impact: the journey to employment* (2013)<sup>39</sup>, also cites the researchers’ work. This guide to understanding and measuring what matters for young people states:

*“People with poor numeracy skills are more than twice as likely to be unemployed as those who are competent at numeracy.”* [Illuminating disadvantage]

## 7.5 KPMG

### **The long term costs of literacy difficulties** (2009)<sup>40</sup>

This publication makes many references to the researchers’ 1997 study of the impact of poor basic skills on 37-year-olds in the National Child Development Study cohort, *It doesn’t get any better*<sup>41</sup>, and to *Illuminating disadvantage*. Commissioned by the KPMG Foundation, a charitable trust, this report estimated that costs to the public purse from the failure to master basic literacy skills in primary school could amount to £2.5 billion a year.

## 7.6 National Literacy Trust

### **Literacy changes lives** (2008)<sup>42</sup>.

The researchers’ work is also referred to very extensively in this National Literacy Trust advocacy resource. The foreword to this document, which has been used to help support literacy campaigns in the UK and other English-speaking countries<sup>43</sup>, carries the following statement by Jonathan Douglas, the NLT director:

*“...we have been taking this evidence to policy-makers and opinion-formers to convince them of the wide social benefits of literacy. At the same time we hope that all those who champion literacy in local authorities will be able to use this evidence to demonstrate the pertinence of literacy to a wide range of outcomes. And we hope that it will inspire all those*

<sup>38</sup> <http://www.nationalnumeracy.org.uk/resources/7/index.html>

<sup>39</sup> <http://inspiringimpact.org/wp-content/uploads/2013/03/Inspiring-Employability-final-for-web.pdf>

<sup>40</sup> [https://www.kpmg.com/UK/en/IssuesAndInsights/ArticlesPublications/Documents/PDF/What%20We%20Do/ecc-long\\_term\\_costs\\_of\\_literacy\\_report\\_2nd\\_edition.pdf](https://www.kpmg.com/UK/en/IssuesAndInsights/ArticlesPublications/Documents/PDF/What%20We%20Do/ecc-long_term_costs_of_literacy_report_2nd_edition.pdf)

<sup>41</sup> Bynner, J. and Parsons, S. (1997) *It doesn’t get any better: The impact of poor basic skills on the lives of 37 year olds*. London: Basic Skills Agency.

<sup>42</sup> [http://www.literacytrust.org.uk/assets/0000/0401/Literacy\\_changes\\_lives\\_2008.pdf](http://www.literacytrust.org.uk/assets/0000/0401/Literacy_changes_lives_2008.pdf)

<sup>43</sup> For example, *Too young to fail: Giving all children a fair start in life* (2013), Save the Children [http://www.savethechildren.org.uk/sites/default/files/docs/Too\\_Young\\_to\\_Fail\\_0.pdf](http://www.savethechildren.org.uk/sites/default/files/docs/Too_Young_to_Fail_0.pdf)  
Northern Healthy Communities Partnership (Saskatchewan)  
[http://www.nhcp.ca/babies\\_booking\\_and\\_bonding/information\\_on\\_literacy.html](http://www.nhcp.ca/babies_booking_and_bonding/information_on_literacy.html)

*teachers, librarians and other professionals who support literacy by confirming their knowledge that their work transforms lives and builds communities.”*

## 7.7 Beanstalk

### ***The Beanstalk Charter for children’s literacy*** (2013)<sup>44</sup>

Launched to mark the 40<sup>th</sup> anniversary of this national literacy charity, this publication refers to several of Bynner and Parsons’ cohort-based studies. It states:

*“Those with lower literacy are reportedly less likely to own their own home and more likely to live in overcrowded conditions, with cohort studies suggesting women with low literacy are more likely to have their first child at a younger age and to have more children.”*

## 7.8 Smith Institute and Centre for Social Justice

### ***Getting in early: Primary schools and early intervention*** (2008)<sup>45</sup>

This report by the Smith Institute and the Centre for Social Justice cites the following findings from *Does numeracy matter more?*

*“After controlling for other relevant factors (poverty, family environment, poor educational experiences, early signs of behaviour problems), poor literacy scores are a significant predictor of the number of times males are arrested over their life course; for women, poor numeracy is the significant predictor.”*

## 8. Education organisations

### 8.1 NIACE

Bynner and Parsons’ findings helped to convince the National Institute of Adult Continuing Education that it should instigate an independent inquiry into adult numeracy learning chaired by Dame Mary Marsh. The inquiry report, ***Numeracy counts*** (2011) advocated a cultural shift in attitudes towards numeracy and maths. In 2013, NIACE, along with more than 20 partner organisations, launched the Maths4Us initiative. Supported by the Department for Business, Innovation and Skills (BIS), Maths4Us aims to provide more opportunities and resources for adults to re-engage with maths learning. One of NIACE’s Maths4Us reports, ***Making staff count: Effective strategies to develop numeracy in local authorities***<sup>46</sup> also cites *New light on literacy and numeracy*.

Another high-profile NIACE report, ***Work, society and lifelong literacy*** (2011)<sup>47</sup>, the report of the inquiry into adult literacy in England, refers to *New light on literacy and numeracy* and *Illuminating disadvantage* several times. This inquiry, chaired by former Conservative education minister, Lord Boswell, noted:

*“Longitudinal research studies show that those with limited literacy face increasing problems as they get older. They are more likely than those with good or average skills to be unemployed or in jobs with low income and poor prospects of promotion. They are more likely to be in poor health or suffer from depression. Similar studies show that individuals with literacy skills at or below Entry Level 2 experience substantially worse life chances, quality of life and social inclusion. Children of parents with poor skills are also more likely to have poor skills.”*

---

<sup>44</sup> <http://www.beanstalkcharity.org.uk/news-and-media/latest-news/charter>

<sup>45</sup> <http://www.smith-institute.org.uk/file/GettingInEarlyPrimaryschoolsandearlyintervention.pdf>

<sup>46</sup> [http://maths4us.org/wp-content/uploads/2013/09/making\\_staff\\_count\\_final.pdf](http://maths4us.org/wp-content/uploads/2013/09/making_staff_count_final.pdf)

<sup>47</sup> <http://www.niace.org.uk/sites/default/files/documents/publications/Literacy%20Inquiry%20-%20Full%20report-WEB.pdf>

A third NIACE inquiry -- into family learning in England and Wales – also draws on Bynner and Parsons’ research. The report of this inquiry, **Family learning works** (2013)<sup>48</sup>, which was chaired by Baroness Howarth of Breckland, cites *New light on literacy and numeracy* at the end of the following paragraph:

*“It is obvious to anyone who has ever worked with struggling families that most want the best for their child and want their child to do better than they did – they just may not know how to achieve this. Giving such families the support they need can make a huge difference, addressing the range of societal factors that tend to cluster around adults with poor skills; for example, poorer housing and health and more engagement in crime.”*

NIACE also refers to *Does numeracy matter more?* in the opening paragraph of a report it produced for the Museum Libraries Archives Council, **Adult numeracy and museums and archives** (2009)<sup>49</sup>:

*“Research suggests that numeracy skills affect life chances and ambitions, from childhood and into adulthood. For both men and women, having skills below Entry Level 3 (skills expected of an 11-year-old) appears to greatly impede full economic and social participation.”*

Two paragraphs later the report’s authors add a second reference to *Does numeracy matter more?*

*“Research shows that in many cases numeracy matters more than literacy – this is particularly true for women. Those with poor numeracy are less likely to be in a full-time job at age 30. They are also less likely to be in any form of paid employment (including part-time), and more likely to be engaged in home care.”*

Two of Bynner and Parsons’ other studies, *New light on literacy and numeracy* and *Basic skills and social exclusion* are also referred to in **Raising aspirations: guidance for integrating literacy, language and numeracy into courses for young mums, dads and parents-to-be**<sup>50</sup>. This guidance was produced for the NIACE/National Youth Agency Young Adults Learning Partnership.

## 8.2 CfBT

### **Adult basic skills** (2010)<sup>51</sup>

An international research review commissioned from the National Foundation for Educational Research by the CfBT Education Trust, this document also cites *New light on literacy and numeracy* several times.

*“...individuals who improve their basic skills in adulthood are more likely to own their own home, have savings, and are less likely to be on benefits than those who do not (Bynner and Parsons, 2006).....”*

---

<sup>48</sup> <http://shop.niace.org.uk/family-learning-inquiry-report.html>

<sup>49</sup> [http://webarchive.nationalarchives.gov.uk/20110802101741/http://www.mla.gov.uk/what/policy\\_development/learning/~media/Files/pdf/2009/Adult\\_Numeracy\\_Museums\\_Archives\\_updated.ashx](http://webarchive.nationalarchives.gov.uk/20110802101741/http://www.mla.gov.uk/what/policy_development/learning/~media/Files/pdf/2009/Adult_Numeracy_Museums_Archives_updated.ashx)

<sup>50</sup> [http://shop.niace.org.uk/media/catalog/product/R/a/Raising-Aspirations\\_1.pdf](http://shop.niace.org.uk/media/catalog/product/R/a/Raising-Aspirations_1.pdf)

<sup>51</sup> <http://www.cfbt.com/en-GB/Research/Research-library/2010/r-adult-basic-skills-2010>



*“Bynner and Parsons (2006) found that men who improve their literacy skills (from ages 21 to 34) are more likely to be in full-time employment; for women, this pattern was found with regard to their numeracy skills...”*

*“Bynner and Parsons (2006) used the 1970 British Cohort Study data and found that adults who improved their numeracy skills between the ages of 21 and 34 were more likely to have their own home and savings, and less likely to be on benefits than those who did not improve their skills. Bynner and Parsons found that women who had improved their literacy or numeracy by the age of 34 were more likely to be better off and to have savings and investments. By the age of 34, men who had improved their literacy or numeracy were more likely to have their own home, less likely to be on state benefits or to be borrowing money from friends and family.”*

## **9. Media reports**

Bynner and Parsons' BCS70-based research has also been the subject of a number of newspaper articles. See, for example:

“Basic needs”, *Guardian*, July 5, 2005

<http://www.theguardian.com/society/2005/jul/05/socialexclusion.politics>

“Skills merger aims to support all learners”, *Guardian*, July 3, 2007

<http://www.theguardian.com/education/2007/jul/03/furthereducation.uk3>

**ENDS/...**