



National Research and Development Centre
for adult literacy and numeracy

Assessing the impact of family literacy programmes

Helen Casey
Executive Director NRDC
21 September 2009



National Research and Development Centre
for adult literacy and numeracy

Recent NRDC research on FLLN

- International research review – CfBT 2008
- Practitioner handbook – CfBT 2008
- Parents' Basic Skills and their children's test scores – NRDC 2008
- Forthcoming report on the impact of family literacy – Learning and Skills Improvement Service (LSIS)



National Research and Development Centre
for adult literacy and numeracy

CfBT International review

Benefits for parents' skills reported from test data:

- literacy: 3 one-group studies, but 2 others reported no benefit over control groups
- language: 2 studies
- numeracy: 2 studies



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

CfBT International review (2)

Parents' ability to help their children's education:

- Benefits reported by eight studies

Wider benefits reported from numerous projects
around the world



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

CfBT International review (3)

Benefits for children's skills reported from test data:

- literacy: 12 studies
- language: 8 studies
- numeracy: 6 studies
- 7 studies gathered follow-up data; almost all showed benefits had been sustained



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

Research on parents and children – NRDC with CEE

The primary research question:

- What impact do parents' basic skills have on their children's cognitive skills?



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

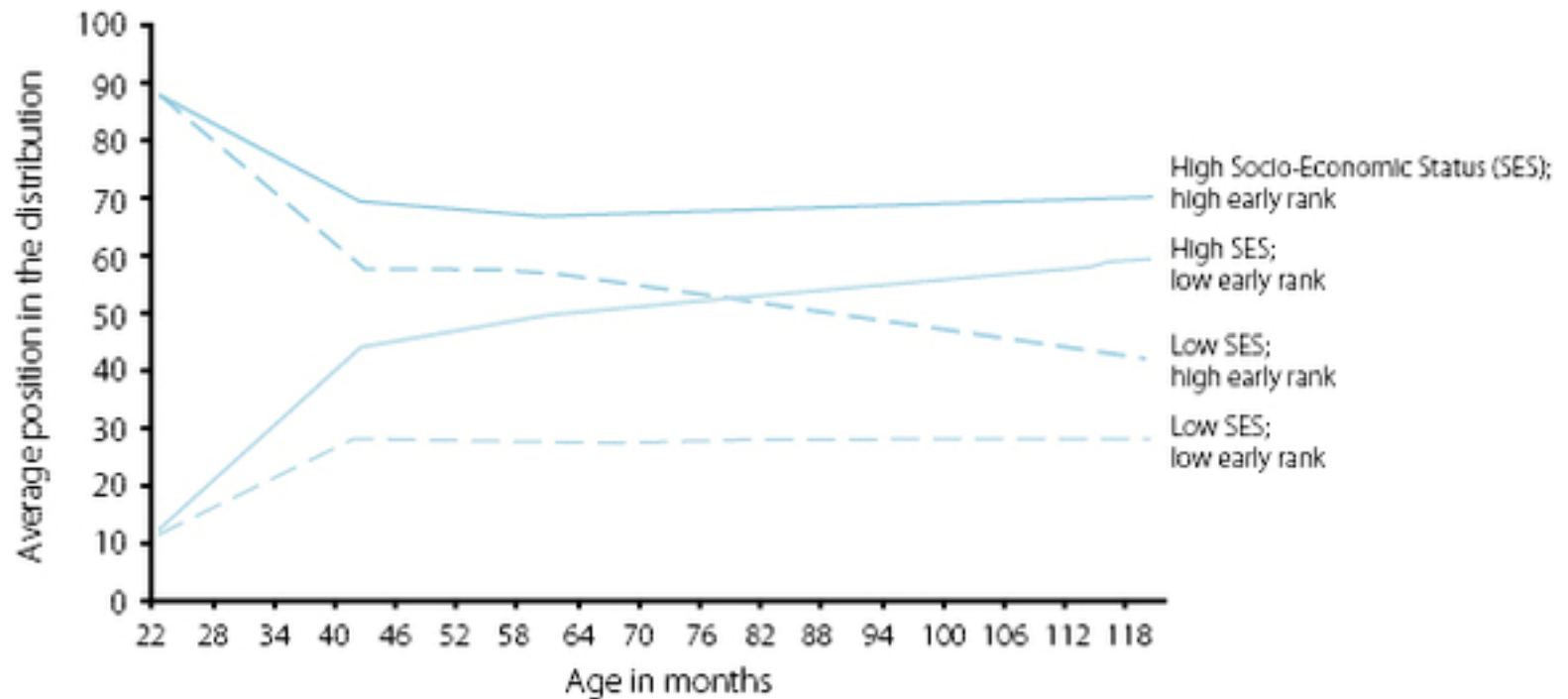
Children's cognitive skills

- Early cognitive ability is an important determinant of schooling, wages and success in many aspects of social and economic life.
- Significant ability gaps across different socioeconomic groups. These gaps open up at early ages, before children enter school.
- These early cognitive differences persist and increase as children age.



National Research and Development Centre
for adult literacy and numeracy

Influence of socioeconomic status on children's cognitive skills



Source: Feinstein 2003



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

Intergenerational transfer of disadvantage

- Poor adult literacy and numeracy strongly associated with having experienced educational disadvantage in early childhood, e.g. having:
 - parents who lack qualifications
 - lack of parental support for one's own education.



National Research and Development Centre
for adult literacy and numeracy

Intergenerational transfer of disadvantage

- Do parents' basic skills have a direct and independent impact on their children's cognitive skills?
 - (even taking into account parents' education, qualifications, socioeconomic status, the family structure, etc.)



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

Data sources

- **British Cohort Study 1970 (BCS70):** following the lives of all individuals born in the UK in one week in April 1970.
- These individuals have been surveyed and assessed roughly every 5-7 years.
- Started with 17,000+, now there are 9,665.
- In 2004, everyone in the BCS70 had their literacy and numeracy assessed.
- We investigated a random subsample of 2,824 who had one or more children.



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

Number of children, by age group and sex

Age groups	male	female	Total
age 0-2	700	626	1,326
age 3-6	665	694	1,359
age 6-16	1,290	1,232	2,522
Total	2,655	2,552	5,207



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

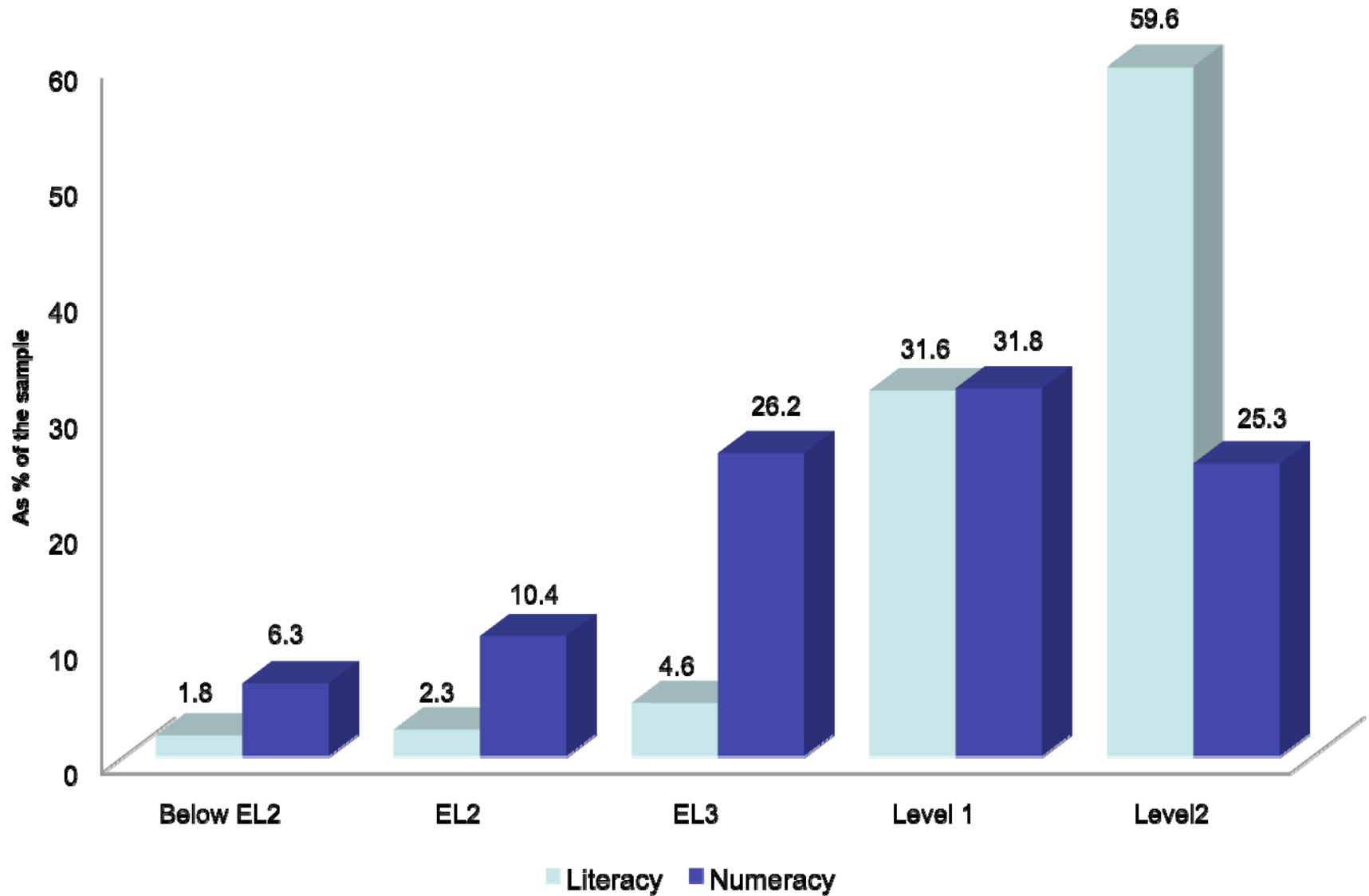
Cognition tests for children

- Children tested using British Ability Scale (BAS)
- Children aged 3-5: tested on “Early Number Concepts”, “Naming Vocabulary”
- No great surprises in children’s scores: some high, some low, most of them in the middle
- By combining the results of these two tests, we created an amalgamated measure of cognitive ability



Leading education
and social research
Institute of Education
University of London

Parents' literacy and numeracy levels





National Research and Development Centre
for adult literacy and numeracy

Other factors that might influence children's scores controlled for

- Child characteristics (gender, age, whether first born, number of siblings)
- Socio-economic background (parents' occupations, qualification, household income)
- Family structure (number of siblings, lone parenthood)
- Parents' early cognitive ability (test score at age 5)



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

What was the effect of better parental basic skills?

Compared to children whose parents had skills **below Entry Level 2**:

- When parents scored at Level 1 or Level 2 in literacy, their children did much better on their own cognitive tests.
- Children did better when parents scored at Entry level 3, Level 1 or Level 2 in numeracy.
- Suggests that government may be right to focus its targets on E3 numeracy and L1 literacy.

	Literacy	Numeracy
Entry level 2	No effect	No effect
Entry level 3	No effect	47% better
Level 1	64% better	57% better
Level 2	73% better	59% better



National Research and Development Centre
for adult literacy and numeracy

Does the effect differ depending on parental education level?

- Yes: we only find an impact for parents whose highest qualification is at Level 2 or below.
- Why does it differ?
 - Parents with more education showed less variation in their basic skills levels.
 - In families where the parents have more education, there may be more factors contributing to children's cognitive skills.
- This finding suggests that focusing on adults with qualifications at Level 2 or below could have positive intergenerational effects.
- How large was the effect?
 - One standard deviation improvement in parents' skills: 12.8% improvement in children's skills.
 - If there are 100 people lined up in order of their basic skills score, the person exactly in the middle is one standard deviation above the person at position 16.
 - The person in the middle is one standard deviation below the person at position 84.
- No gender effect: neither mothers' nor fathers' skills were more important.



National Research and Development Centre
for adult literacy and numeracy

But is this relationship causal?

- The relationship between parents' basic skills and children's cognitive skills may be due to unobserved factors, for example:
 - Quality of parenting
 - Parental ambition or motivation



National Research and Development Centre
for adult literacy and numeracy

But is this relationship causal?

- If the relationship is **causal**, parents' basic skills:
 - Will have an impact on children's cognitive skills, but...
 - Are less likely to have an impact on children's non-cognitive skills, e.g. emotional and behavioural issues
- If the relationship is **non-causal**, parents with better basic skills will also have unobserved characteristics (separate from the basic skills) that help children better develop their cognitive skills, e.g., a high level of ambition for their children.
 - If this is the case, when we find parents with better basic skills, their children should have better cognitive *and* non-cognitive skills
 - (A rising tide is lifting all boats)



National Research and Development Centre
for adult literacy and numeracy

But is the relationship causal?

- The relationship is causal.
- Higher parental basic skills had an impact on children's cognitive skills, but not on their non-cognitive skills.
- One standard deviation higher among parents: 9% higher score for children.
 - i.e. the child of a parent at position 84 will have on average a 9% higher score than the child of a parent at position 50
 - who will in turn have on average a 9% higher score than the child of a parent at position 16



National Research and Development Centre
for adult literacy and numeracy

Research conclusions and implications

- Among parents with Level 2 or below qualifications, the better the parents' basic skills, the better their young children's cognitive skills are likely to be.
- This holds true even within each individual qualification level.
- It also holds true when controlling for education, socioeconomic status and a wide range of other key variables.
- There was no gender effect: neither mothers' nor fathers' skills were more important.



National Research and Development Centre
for adult literacy and numeracy

Research conclusions and implications (2)

- Strong implications for policy.
- Policies aimed at increasing parents' basic skills may have potentially large intergenerational effects on the cognitive skills of their children.
- There is particular scope for policies targeted at low qualified adults.



National Research and Development Centre
for adult literacy and numeracy

Current context

- The two-generation model of Family Literacy was imported into England from the USA
- In 1994 the Basic Skills Agency established four family literacy demonstration programmes in areas of multiple deprivation
- The government sees family literacy as playing a key role in increasing social inclusion and reducing intergenerational transfer of disadvantage



National Research and Development Centre
for adult literacy and numeracy

Policy drivers

- The government's commitment to family literacy can be seen in:
- *Every Child Matters (2004)*
- *Every Parent Matters (2007)*
- *The children's plan: building brighter futures (2007)*
- *Skills for Life: changing lives (2009)*



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

Funding 2008 - 2011

- £25m per year for the delivery of Family Literacy, Language and Numeracy (FLLN) programmes and £12m for Wider Family Learning (WFL).
- £10m per year on Family Learning Impact Funding (FLIF).



National Research and Development Centre
for adult literacy and numeracy

New research

- Active research from November 2007 to July 2009
- Led by the NRDC with NIACE, funded by LSIS for BIS
- Key objective to establish the impact family literacy courses have on parents and their children.
- Future plans to analyse the impact of family numeracy and family language.



Leading education
and social research
Institute of Education
University of London



National Research and Development Centre
for adult literacy and numeracy

Methods and sample

- It employed a mixed methods approach of both quantitative and qualitative research
- Over 70 family literacy courses were evaluated across England
- Around 60% were short courses (30-49 hours); 40% were standard course (60-72 hours)



National Research and Development Centre
for adult literacy and numeracy

Assessment and interviews

- Almost 600 parents and over 500 children were assessed in a range of areas, including progress in reading and writing
- Over 100 parents and over 120 tutors and teachers were interviewed.
- 33 LA managers and 9 headteachers were also interviewed



National Research and Development Centre
for adult literacy and numeracy

Parents and children

- Most parents were women, with English as their first language
- The children were aged between 3 and 7 years old



National Research and Development Centre
for adult literacy and numeracy

Impact on attitudes and behaviours

- For the great majority of parents the prime motivation was to learn about the school curriculum to support their children's literacy skills.
- The majority were concerned with spending quality time with their children and supporting their children's learning, rather than developing their own literacy skills.



National Research and Development Centre
for adult literacy and numeracy

Impact on attitudes and behaviours (2)

- Parents reported that since taking a family literacy course they had become more involved in their child's pre-school or school.
- A majority of parents wanted to progress to further study and/or training.
- Many parents reported that they had been on another course since the family literacy course,



National Research and Development Centre
for adult literacy and numeracy

Benefits

- The vast majority of parents were very positive about their experience of family literacy: they reported gaining some kind of benefit from the course and thought that they had continued to benefit from attending the course three months later.



National Research and Development Centre
for adult literacy and numeracy

For more information, please visit
www.nrdc.org.uk



Leading education
and social research
Institute of Education
University of London