The impact of pre-school on children's development: Using research to inform policy

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The impact of pre-school on children's development: Using research to inform policy

Abstract
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Effective Pre-School and Primary Education Project 3-11 (EPPE 3-11)

The Impact of Pre-school on Children’s Development: Using research to inform policy

EPPE is an “Associate” project of the TLRP

TLRP July 2006
The EPPE 3-11 Team

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Policy climate

- Commissioned in the late 1990s within an educational and political climate....

- Focus on **standards** particularly for the early years of statutory schooling.

- Early stages of producing **curriculum guidance** for early years.

- **Range of providers** for early years e.g. both voluntary and maintained sectors.

- **Little regulation** of the sector e.g. poor framework for qualifications, no universal access.

- Focus on moving **children out of poverty** through increasing **working households**.

- **Equality of provision**, especially disadvantaged families.
Research Questions with the focus on early education

- What is the impact of pre-school on young children’s intellectual and social/behavioural development?

- Are some pre-schools more effective than others in promoting children’s development?

- What are the characteristics of an effective pre-school setting?

- Can pre-school experience reduce social inequalities?
Sources of Data

- Child assessments over 4 years e.g. cognitive tasks and social-emotional profile.
- Interviews e.g. with parents and heads of centres, and local authority officers.
- Systematic rating of ‘quality’ in centres.
- Documents e.g. curriculum statements, policy documents etc.
- Qualitative case studies of centres.
An educational effectiveness approach

What makes EPPE’s findings persuasive:

- It was the first to use an “educational or school effectiveness” research design to investigate pre-schooling.
- It investigates ‘natural’ variation (avoiding the social difficulties of a randomised control trial).
- Uses multi-level modelling so can report pupil and class/school level.
- Rigorous and sound data collection.
- Combines both qualitative and quantitative research methodologies.
- Can describe the contribution of families and educational settings to children’s developmental progress 3–7 years (both cognitive and social/behavioural).
Key features of method mixed research design

- Quantitative analyses enable comparisons across settings and by type of provision taking account intake differences in terms of significant child, family and home factors including prior attainments or social behaviour (estimates of centre effectiveness based on ‘value-added’ for cognitive progress and social behavioural development).

- Detailed qualitative cases studies of more effective pre-school settings explore organisation and processes, including pedagogy, associated with positive child outcomes and increase understanding of best practice.
Assessments

- **At 3** - non-verbal reasoning, spatial awareness, naming vocabulary, verbal comprehension.
- **At 5** – as above + early number skills and pre-reading skills.
- **At 6** – NFER assessments of reading and maths.
- **At 7** – National assessments.

+ Attendance, FSM, Special needs profiles, child report.

- **At all time points** - Social and behavioural development i.e. co-operation/conformity, independence/concentration, peer sociability, anti-social etc.
Measuring Value Added

- Children’s progress was assessed controlling for *prior attainment* at entry to the study at age 3+ (pre-test/post-test).

- Also child, parent, and home learning environment factors were included in the analyses (as co-variants).

**Child Measures** controlled for:

- gender
- ethnicity
- number of siblings
- first language
- birth weight

**Family Measures** controlled for:

- SES
- education
- employment
- home learning environment
Policy Question: What is the impact on children of attending pre-school at different ages and for different patterns of attendance?

EPPE Answer: Pre-school benefits ALL children. There were significant benefits associated with an early start and part-time produced no significant gains over full time. Some raised scores on ‘anti-social behaviour’ for a small number of babies/toddlers.

Policy Development: Universal free provision for all children aged 3-4 covering 15 hours per week. Pilot scheme for free pre-school for 2 year olds in disadvantaged areas. Extended maternity and paternity leave during baby’s first year.
Findings – Long term impact of pre-school

Policy Question: Does the initial benefits of pre-school ‘wash out’.

EPPE Answer: Many of the benefits of pre-school are still apparent at aged 7.

Policy Development: Improving the quality of pre-school especially for our most disadvantaged children.
The contribution of social class and pre-school to literacy attainment (age 7)

**READING at key stage 1, social class and pre-school experience**

- **Mean year 2 reading level**
  - Social class by occupation: Professional, Skilled, Un/semi skilled
  - Pre-school
  - No pre-school
  - Expected minimum

**WRITING at key stage 1, social class and pre-school experience**

- **Mean year 2 writing level**
  - Social class by occupation: Professional, Skilled, Un/semi skilled
  - Pre-school
  - No pre-school
  - Expected minimum
Reading Attainment over time by social class and pre-school

Reading Attainment Over Time
by Social Class and Pre-School Experience
Policy Question: Are some pre-schools more effective than others? What is the contribution of the quality of the ‘Home Learning Environment’ (HLE – e.g. reading to child, playing with letters and numbers, visits to the library) to children’s outcomes?

EPPE Answer: Children made more gains in integrated settings and nursery school. The HLE was a stronger predictor of later success than mother’s qualifications.

Policy Development: 10 Year Strategy for Childcare. £3 billion investment in the roll out of Children’s Centres across the country, starting in the most disadvantaged areas. Focus on improving the HLE for disadvantaged families.
Findings – Improving quality

Policy Question: What factors are associated with better quality?

EPPE Answer: Findings from the case studies refer to specific pedagogy practices (e.g. sustained shared thinking, positive questioning etc.) associated with more effective settings and the relationships between staff characteristics and measurement of quality (and child outcomes).

Policy Development: New inspection arrangements across the whole sector. More regulation across the sector. New framework for training across the sector including new professional status for early years staff. Curricular guidance for young children. Focus on working with parents (particularly from disadvantage background).
The Impact of EPPE

- At National level: Through policy changes. ‘The EPPE study provides essential evidence which now underpins the work of the Sure Start Unit’ Head of Communications Sure Start DfES May 2003.

- At Local Authority level: Working with Local Authorities who are re-configuring their services.

- At practitioner level: Focus on practical pedagogy.
What has contributed to the success of EPPE?

- Political climate – ‘pushing on an open door’.

- “The subject and technical expertise of the Principal Investigators, robust multi-level modelling, high response rates on data collection, low attrition rates, and contribution of in-depth qualitative evidence have all been important in enabling this degree of influence on policy and practice”.

- “High volume of dissemination within central government, Parliamentary committees, local policymakers, practitioners, parents and academics, through conferences, seminars, briefings, the media and websites”.

- “Flexible in carrying out additional analyses within short-term timescales, for example for Spending Reviews”.

For further Information about EPPE visit the EPPE website at
http://www.ioe.ac.uk/projects/eppe
or Tel 020 7612 6219 Brenda Taggart Research Co-ordinator

or the DfES website at:
http://www.dfes.gov.uk/research/