

Institution: Birkbeck College
Unit of Assessment: Psychology, Psychiatry, & Neuroscience
Title of case study: Early years experience and longer-term development: Evidence and policy
1. Summary of the impact (indicative maximum 100 words)

The Effective Provision of Pre-school Education (EPPE) project led by Edward Melhuish produced major government policy changes since 2008. EPPE is a longitudinal study focussing on the impact of early childhood education and the home learning environment on educational and social development. The government's recent decision to extend free early years provision for disadvantaged children was based on EPPE's finding (highlighted in several government reviews) that good quality early education has long-term benefits, in particular for disadvantaged children. EPPE also demonstrated the critical role of better-qualified early years staff, which has led to new policy recommendations on staff training.

2. Underpinning research (indicative maximum 500 words)
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Research into the effectiveness of early years educational provision started in 1996. This case study refers to research, outcomes, and impacts from 2008 onwards. The original Effective Provision of Pre-school Education (EPPE) project morphed into the Effective Pre-school & Primary Education and the Effective Pre-school, Primary & Secondary Education (EPPSE) projects. A parallel project was conducted in Northern Ireland (EPPNI). These projects were conducted jointly by Birkbeck, the Institute of Education (IOE) and the University of Oxford. Birkbeck contributed particularly to research design and analyses, and to child development and parenting measures, including the theory behind choosing particular measures. (described in Department for Education reports: <http://www.education.gov.uk/search/results?q=EPPE>).

In EPPE, more than 3000 children were followed from age 3, with retrospective data going back to birth. Their development was monitored until they entered school (age 5), and then at key time points (6, 7, 10, 11, 14 and 16 years). Central research questions were:

- Does early years provision affect children's attainment in later years?
- How do child, parent and home characteristics relate to development in later years?
- What is the impact of variations in pre-school experiences for later educational and social development?
- What is the impact of pre-school quality and effectiveness on outcomes?
- How do pre-school and school influences differ for more and less disadvantaged children?

Observations, interviews, questionnaires and assessments were conducted longitudinally alongside national data on primary and secondary schools, focusing on factors and experiences related to children's cognitive, educational and social development, and intensive case studies to 'un-pack' effective practices.

Short term effects: EPPE showed that pre-school education enhances all-round development in children, with every month after 2 years of age adding benefit. Disadvantaged children benefit significantly from good quality pre-schooling, in particular in integrated settings (prototype of Children's Centres) and nursery schools. Staff with higher qualifications offer richer learning environments, with sustained beneficial effects on development.

Medium term effects: At Key Stage 1, pre-school effects remain evident. Advantages for a child's development of attending a particularly 'effective' pre-school centre persist up to age 7, and primary school effectiveness also has important impacts.

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Longer term effects: At Key Stages 2 and 3 (age 11 and 14), good early years experiences confer significant lasting benefits in terms of better attainment and social/behavioural outcomes. Current analyses are looking at Key Stage 4 (age 16) with provisionally similar results.

Children attending high quality pre-schools had better outcomes at ages 10, 11 and 14. Attending a more academically effective primary school further enhanced their learning and social/behavioural profile. High quality pre-school education acted as a 'protective' factor for children who went on to attend a less effective primary school. Quality pre-schooling for the most disadvantaged children can prevent special educational needs later. Moreover, there are *combined* effects of preschool and primary school in shaping children's educational outcomes, in particular for disadvantaged children. Other EPPE findings highlight the importance of the home learning environment, especially for vulnerable groups. Detailed results are described in the articles and reports listed below.

3. References to the research (indicative maximum of six references)

Peer-reviewed articles:

Melhuish, E.C., Sylva, K., Sammons, P., Siraj-Blatchford, I., Taggart, B., Phan, M. & Malin, A. (2008). Preschool influences on mathematics achievement. *Science*, 321, 1161-1162.

Melhuish, E.C., Sylva, K., Sammons, P., Siraj-Blatchford, I., Taggart, B., & Phan, M. (2008). Effects of the Home Learning Environment and preschool center experience upon literacy and numeracy development in early primary school. *Journal of Social Issues*, 64, 95-114.

Melhuish, E. (2010). Why children, parents and home learning are important. In Sylva, K., Melhuish, E., Sammons, P. Siraj-Blatchford, I., & Taggart, (Eds) (2010). *Early Childhood Matters: Evidence from the Effective Pre-school and Primary Education Project*. London: Routledge.

Melhuish E. C. (2011). Preschool matters. *Science*, 333, 299-300.

Government reports:

Sammons, P., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B., and Hunt, S. (2008). *Influences on Children's Attainment and Progress in Key Stage 2: Cognitive outcomes in Year 6*. Department for Children, Schools, and Family (DCSF).

Melhuish, E., Quinn, L., Sylva, K., Sammons, P., Siraj-Blatchford, I., and Taggart, B. (2010). *Pre-school Experience and Key Stage 2 performance in English and Mathematics*. Belfast: Dept. for Education (www.deni.gov.uk/no_52_2010.pdf)

Research Grants:

(G1) Melhuish, E Effective Pre-school Primary & Secondary Education (with K. Sylva, P. Sammons, Oxford University & I. Siraj-Blatchford & B. Taggart, Institute of Education). DfES, UK government £ 2.2 million. 2007- 2012.

(G2) Melhuish, E Sylva, K., Sammons, P. Oxford University & Siraj-Blatchford I., & Taggart, B., Institute of Education Transition from Primary to Secondary School. DfES, UK government £121,000, 2007- 2009

(G3) Melhuish, E A longitudinal study of preschool effects upon eleven year olds in Northern Ireland. Northern Ireland Dept. of Education. £35,000 2009-2011

(G4) Melhuish, E., Sylva, K., Sammons, P. Oxford University & Siraj-Blatchford I., & Taggart, B., Institute of Education Effective Pre-school, Primary and Secondary Education 3-16 (EPPSE 3-16), £1.6 million. 2010 – 2013.

(G5) Melhuish, E. Linking Longitudinal Data. Dept. for Education. £70,000. 2012- 2013

4. Details of the impact (indicative maximum 750 words)

EPPE has influenced government policy on pre-school education and has informed policy efforts to improve pre-school quality, including staff training. Early years provision has increased dramatically in the last thirteen years, and funding for the most disadvantaged children has become a priority. The government commitment in 2004 to provide all 3 and 4 year olds with free entitlement to nursery education for up to six terms (doubling the annual cost of nursery provision to £2.6b) was heavily influenced by multiple EPPE reports for DfE, which showed that pre-school education had sustained impact on attainment. This policy change has continued to affect over 600,000 children in each year group during the current assessment period.

Since 2008, results from EPPE have directly influenced policy decisions on poverty, early years and primary education. Melhuish gave evidence on early years provision to Treasury Minister Danny Alexander (August, 2010), when the Treasury were undertaking a comprehensive spending review. Early years provision was relatively protected from cuts, with the free early education offer to 3-year-olds being maintained. Melhuish also gave evidence on the benefits of extending the free early education offer to 2-year-olds in disadvantaged families to Nick Clegg (Deputy PM), Michael Gove, and Sarah Teather (DfE) in May 2012. He provided input to government reviews, featuring prominently in the Field (2010), Allen (2011), and Tickell (2011) reviews (sources S1-S3). In these government reviews, the skills gap between rich and poor children in the early years was identified as a key problem. The finding from EPPE research that early education starting from 2 years of age can have long term benefits was cited as empirical evidence that early years provision can help to reduce this gap. Results from EPPE also featured prominently in another government report 'Opening Doors, Breaking Barriers' (2011, source S4). In this report, EPPE's findings that good quality early education is particularly beneficial for the most disadvantaged children, with benefits still visible at age 11, was discussed as demonstrating that long-term outcomes are obtainable from investment in pre-school.

As a consequence of the EPPE findings of long-term benefits of very early educational provisions described in these government reviews, government policy was changed to extend free early years provision for disadvantaged children. In 2012, the government announced free early education for the 20% most disadvantaged 2 year olds from September 2013 (around 120,000 children in England) and this will be extended to the 40% most disadvantaged (240,000 in England) from September 2014.

EPPE's findings that increasing the number of higher qualified degree level staff results in a richer learning environment and produces sustained beneficial effects, in particular for the most disadvantaged children, also affected government policy. These findings featured prominently in the Early Years Evidence Pack (2008, source S5) published by DfE on training staff to a higher level, in order to improve child outcomes, highlighting early years staff qualifications as a driver of quality. Referring to EPPE, a guidance document by OFSTED ('The impact of the Early Years Foundation Stage', 2011, source S6) underlined the importance of good staff qualifications, and recommended that local authorities should target staff training to improve the quality of provision. This finding featured in the Nutbrown Review of early education and childcare qualifications (2012, source S7), which made 19 recommendations towards improving quality of care and training for staff in early years, including having a qualified teacher working with pre-school children as a curriculum lead (found to be particularly useful in EPPE). In a recent speech (January 2013, source S8), Children's Minister Elizabeth Truss recommended a Nursery Nurse Diploma with improved level 3 qualifications. She supported this view by referring to EPPE findings that children make better progress where trained teachers were present.

Melhuish is a regular contributor to international reports. A World Health Organisation (WHO) report on mental health, resilience, and inequalities (2009, source S9) underlined the importance of EPPE's finding that the quality of the home learning environment is more influential than traditional measures of disadvantage such as parental socioeconomic status and education. An OECD report on early childhood education and care (2009, source S10) referred to EPPE as a good example of longitudinal large-scale programme evaluation research. Melhuish gave a keynote address on

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early intervention at the European Union conference (2011). He was the research advisor to the EU Delegation on Early Years Policy (2011), and is a consultant for the OECD, WHO, European Commission, and the European Social Network.

5. Sources to corroborate the impact (indicative maximum of 10 references)

(Full URLs and additional tinyurl links have been provided for all weblinks. Copies of all source materials are available upon request if external weblinks are no longer operational.)

S1. Frank Field (December 2010) The Foundation Years: preventing poor children becoming poor adults. The report of the Independent Review on Poverty and Life Chances (see in particular pp.41-46 for detailed references to EPPE):

http://webarchive.nationalarchives.gov.uk/201110120090128/http://povertyreview.independent.gov.uk/final_report.aspx
<http://tinyurl.com/pt5gos5>

S2. Graham Allen (2011). Early Intervention: The next steps. An Independent report to HM Government:

<http://www.dwp.gov.uk/docs/early-intervention-next-steps.pdf> ; <http://tinyurl.com/6g8dtq2>

S3. Dame Clare Tickell. The Early Years: Foundations for life, health and learning - An Independent Report on the Early Years Foundation Stage to Her Majesty's Government, March 2011:

<https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-00177-2011>
<http://tinyurl.com/opnbz9m>

S4. Opening Doors, Breaking Barriers, A strategy for social mobility (2011). Nick Clegg. Cabinet Office (EPPE work is referred to in Chapter 2 – Foundation years):

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61964/opening-doors-breaking-barriers.pdf ; <http://tinyurl.com/qz538tb>

S5. Early Years evidence Pack (2008). Dept. of Education. (pages 8-11 refer to EPPE findings):

<https://www.education.gov.uk/publications/eOrderingDownload/DFE-00274-2011.pdf>
<http://tinyurl.com/np3862y>

S6. OFSTED (February 2011). The impact of the Early Years Foundation Stage.:

<http://www.ofsted.gov.uk/resources/impact-of-early-years-foundation-stage>
<http://tinyurl.com/nwsaxx7>

S7. Professor Cathy Nutbrown. June 2012. FOUNDATIONS FOR QUALITY. The independent review of early education and childcare qualifications:

<http://media.education.gov.uk/MediaFiles/A/0/9/%7BA098ADE7-BA9A-4E18-8802-D8D4B060858D%7DNUTBROWN%20FINAL%20REPORT%20-%20final.pdf>
<http://tinyurl.com/bw7pdqc>

S8. Elizabeth Truss speech at the Policy Exchange on childcare, 30 January 2013, London.:

<http://www.education.gov.uk/inthenews/speeches/a00220991/trusschildcareratio>
<http://tinyurl.com/buganto>

S9. World Health Organisation (WHO) (2009). 'Mental Health Resilience And Inequalities' by Dr. Lynne Friedli (references to EPPE on p.19 and p.29):

http://www.euro.who.int/_data/assets/pdf_file/0012/100821/E92227.pdf
<http://tinyurl.com/d2cw752>

S10. OECD – Encouraging Quality in Early Childhood Education and Care (ECEC) (2009):

<http://www.oecd.org/education/school/49322754.pdf> ; <http://tinyurl.com/q8t85tr>