

THE EFFECTIVE PROVISION OF PRE-SCHOOL EDUCATION (EPPE) PROJECT (1997-2003)

TECHNICAL PAPER 10 'INTENSIVE CASE STUDIES OF PRACTICE ACROSS THE FOUNDATION STAGE'

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Introduction

The Effective Provision of Pre-school Education (EPPE) Project is a longitudinal national research study that follows the developmental progress of more than 3,000 children across England. In Technical Paper 10, data from 12 effective pre-school centres, reflecting good child outcomes, (cognitive and/or social behavioural) have been analysed to reveal a unique 'story' for each centre. The associated Researching Effective Pedagogy in the Early Years (REPEY) project¹ enabled the addition of two reception classes to the 12 EPPE cases (i.e. 14 case study centres in total), and this additional data is included in Technical Paper 10.

Key Findings

The findings show that good outcomes for children are linked to early years settings that:

- View cognitive and social development of children as complementary and do not prioritise one over the other.
- Have strong leadership and long-serving staff (three years plus, this was even the case in the private daycare settings where the turnover of staff is normally the highest).
- Provide a strong educational focus with trained teachers working alongside and supporting less qualified staff.
- Provide children with a mixture of practitioner initiated group work and learning through freely chosen play.
- Provide adult-child interactions that involve 'sustained shared thinking' and open-ended questioning to extend children's thinking.
- Have practitioners with good curriculum knowledge combined with knowledge and understanding of how young children learn.
- Have strong parental involvement, especially in terms of shared educational aims with parents.
- Provide formative feedback to children during activities and provide regular reporting and discussion with parents about their child's progress.
- Ensure behaviour policies in which staff support children in rationalising and talking through their conflicts.
- Provide differentiated learning opportunities that meet the needs of particular individuals and groups of children e.g. bilingual, special needs, girls/boys etc.

¹ Siraj-Blatchford, I., Sylva, K., Muttock S., Gilden, R. and Bell, D. (2002) Researching Effective Pedagogy in the Early Years, DfES Research Report 365.

Aims

The aim of the intensive case study analyses has been to tease out the specific pedagogical and other practices that are associated with achieving 'excellent' outcomes compared to those centres with 'good' or more 'average' outcomes. This analysis has been extended significantly in the Researching Effective Pedagogy in the Early Years (REPEY) study (Siraj-Blatchford, et al 2002), which added case studies of two reception classes.

Background

Children (and their families) were recruited into the EPPE study when they were 3 years old, the age at which many enter their first Foundation Stage group setting. Those children who were already enrolled in a group setting entered the study when they turned 3. Developmental status was assessed regularly, beginning when children enter the study and continuing through school entry, at the end of Year 1 and Year 2. Quantitative analysis (multilevel modeling) assessed the contribution of the pre-school setting to a child's cognitive and social/behavioural development having controlled for child factors (e.g. gender, health etc.) and family background characteristics (e.g. socio-economic status, mother education etc.). Full details of the research design may be found in EPPE Technical Paper 1 (Silva et al 1999) and in the Researching Effective Pedagogy in the Early Years (REPEY) Project Report (Siraj-Blatchford et al 2002).

Pre-school settings (141) were drawn from a range of providers (local authority day nursery, integrated centres, playgroups, private day nurseries, maintained nursery schools and maintained nursery classes). A sample of 'home' children (who had no or minimal group pre-school experience) was recruited to the study at entry to school for comparison with the pre-school group. In addition to investigating the effects of pre-school provision on young children's development, EPPE explores the characteristics of effective practice (and the pedagogy which underpin them) through twelve (plus 2 reception classes from REPEY) intensive case studies of settings with good to excellent child outcomes. EPPE has demonstrated the positive effects of high quality provision on children's intellectual and social/behavioural developmental - (EPPE Technical Papers 8a and 8b) by describing gains during the pre-school period (see Sammons et al 2002 and 2003).

Analyses of the quantitative data collected on every child in the study revealed that in some pre-school centres children made progress as expected or better progress than expected given their individual and home characteristics. Settings for the case study research were selected based on a compilation of profiles for each setting on their child outcome data. This enabled an

examination of the variation in child outcomes between centres and the range of outcomes within centres on eight identified cognitive and social development outcomes (a centre scoring '0' on an outcome indicated children had made progress 'as expected'; a score of 1 indicated a positive outcome; and 2 a significantly positive outcome).

All of the settings selected for case study demonstrate a range of practices and all of them demonstrate some above average outcome/s. Put another way, settings were chosen from a range identified as good (if their children made slightly more developmental progress than expected based on their individual child and home characteristics) to excellent (where children made significant developmental progress above their projected developmental progress). The report therefore consistently refers to settings throughout as 'good' (slightly above average) or 'excellent' (well above average) based on their child outcome data.

The report provides comprehensive descriptions of one of each type of early years, group setting implementing the Foundation Stage (local authority day care, private day nursery, playgroup, nursery class, nursery school, integrated provision² and from the REPEY study, one reception class). None of the cases reported fully is meant to be typical of its type of provision.

Across the 14 case studies, centres have varied in their quality of practice but have contributed to effective results in their child outcomes, although in some cases this is very modest e.g. a positive impact on one outcome out of eight social and cognitive development outcomes for their children. In other cases the centre may have a more robust effectiveness profile demonstrating effectiveness in several areas e.g. number, pre-reading or making children less anti-social/worried/upset in their behaviour.

The EPPE definition of 'effectiveness' is based on child outcomes, which was understood as a necessary but insufficient component of quality on its own. High quality provision is related to child outcomes but also to the quality of child care and pedagogical practices that is offered as well. The report shows how the actual practices in the settings vary in important ways.

Detailed Research Findings

Every effort was made to collect comparable data across the case studies and to provide a framework for analysis allowing comparison across centres. Case studies were compared in terms of their key quality characteristics,

² In this case an Early Excellence Centre - which is part of the Government's initiative to provide every region with a one-stop-shop childcare and education service which is responsive to the needs of children, families and local early years staff.

for example the pedagogy employed, the curriculum on offer, the ethos and the management and organisational strategies.

The term 'pedagogy' in this report refers to the instructional techniques and strategies that enable learning to take place. It refers to the interactive process between teacher/practitioner and learner. It also refers to aspects of the learning environment (eg materials provided, organisational techniques, actions of the family and community etc) and how they are harnessed to foster learning in children.

Management and staff

The data reveal that all the case study pre-school settings had strong leadership and long serving staff. Most of the managers and staff had been in the settings over 3 years. Previously published Technical Paper 5 (Taggart et al 2000) has shown that there is a high turnover of staff in the private sector; the private nurseries in the case study sample had stability of staffing with retention between 3-9 years. In the other settings, staff, especially senior management had been in post even longer and 10 to 20 years was not uncommon.

All the managers took a strong lead, especially in curriculum and planning. In most of the settings the strong leadership was characterised by a strong philosophy for the setting that was shared by everyone working in the setting.

The managers of the excellent centres had a strong educational focus, valued the importance of adult-child interaction, and supported their staff to develop better ways of engaging children.

In excellent centres, the staff were encouraged to attend staff development sessions, although there was a great deal of variation in training offered and what staff were able to access. Recent developments enabling local authorities to offer training that includes personnel from all pre-school sectors would appear to be a positive way forward. However the research indicates that training needs to be more sensitive to the needs of staff from different backgrounds. Discussions with local authority personnel and staff in the case study centres revealed that there are wide variations in training backgrounds. Where there are trained teachers, a stronger educational emphasis was found with the teachers playing a lead role in curriculum planning and offering positive pedagogical role modelling to less well-qualified staff.

Ethos and climate of the settings

Perhaps most significantly, the case studies have shown how diverse early years settings are. They show that there is no 'level playing field' in terms of the training of staff, staff salaries and conditions of service, adult-child ratios, resources or accommodation.

The case studies reveal great variation in the conditions and the service provided to children and families. For instance opening times and sessions varied greatly from children attending half-day sessions a few times a week to extended daycare and education being provided full time for 48-50 weeks of the year. There was similar variation apparent in the salaries paid to staff. The salary range for the playgroup was under £3,000 to £7,000 per annum; while the maintained sector was £15,000-32,000 and the private sector £11,000-24,000.

Additionally, the number of children tends to vary from 20 or so in playgroup and nursery classes to 100-200 in nursery schools, local authority day care and fully integrated centres. The staff numbers reflect the numbers of children and the extent of the services on offer to families and other early years practitioners e.g. training support.

Most nursery classes and playgroups are small with two or three members of staff. Most private nurseries are medium sized with 3-8 or more staff and nursery schools with up to 12 staff. The more complex fully integrated³ (combined) centres (and early excellence centres) and local authority daycare centres have large numbers of staff due to larger numbers of children on roll and their outreach work to parents, their role as trainers and their dissemination work. For example, in one case study centre, which caters for 200 children and has Early Excellence Centre (EEC) status, the staff total is 55.

It is clear that EPPE has been able to locate moderate to excellent settings from among all the types of providers. However, there were many fewer settings whose children had better outcomes amongst playgroups and local authority daycare. Given the variation in staff pay, training and development this is unsurprising. There is no level playing field. In spite of this the case study centres were able to portray some or a good deal of quality characteristics in terms of their ethos:-

- a) All case study centres on the whole had a warm, caring, safe, secure and supportive approach to their children. All the settings engaged children in a range of different groupings, individual and group play, group focused table top activities, interest areas and class snack and story times.
- b) All case study settings had a welcoming appearance. The displays on the whole reflected the children's work. Children were generally treated with respect. The centres were warm and inviting places. Staff appeared calm and engaged well with the children. All these centres had fairly good resources and,

³ Throughout this report integrated centres (which in some previous EPPE reports have been referred to as combined centres) are those centres which fully combine education and care with the same ratio of trained teachers as nursery schools for 3-5 year olds.

although not always ideal, space. However the outdoor play environments varied greatly.

Analysis of the quantitative findings with the qualitative case studies data

The case study analysis has gone a long way in providing explanations for the patterns and associations between particular practices (as measured by the Early Childhood Environment Rating Scales R and E, see Sylva et al 1999, Technical Paper 6) and developmental outcomes (see Sammons et al 2002 and Sammons et al 2003). Four patterns of association were identified for special attention and closer analysis of the data from systematic observations suggested that each of the following practices should be investigated further:

- Adult-child verbal interactions
- Differentiation and formative assessment
- Discipline and adult support in talking through conflicts
- Parental partnership with settings and the home education environment

Adult-child interactions

The 'excellent' settings encouraged 'sustained shared thinking'. This refers to an episode in which two or more individuals "work together" in an intellectual way to solve a problem, clarify a concept, evaluate activities, extend a narrative etc. Both parties must contribute to the thinking and it must develop and extend thinking. The research found that this does not happen very frequently. In 'excellent' settings there were significantly more 'sustained shared thinking' interactions occurring between staff and children than in the 'good' settings. When it did occur, it extended children's thinking. Investigations of adult-child interaction have suggested that periods of 'sustained shared thinking' are a necessary pre-requisite for the excellent early years practice, especially where this is also encouraged in the home through parent support.

In the 'excellent' case study settings, the importance of staff members extending child-initiated interactions was also clearly identified. In fact, almost half of all of the child-initiated episodes which contained intellectual challenge, included interventions from a staff member to extend the child's thinking. The evidence also suggests that adult 'modelling'⁴ is often combined with sustained periods of shared thinking, and that open-ended questioning is also associated with better cognitive achievement. However, open-ended questions made up only 5.1% of the questioning used in the 14 case study

settings.

In the 'excellent' settings, the balance of who initiated the activities (staff member or child) was nearly equal, revealing that the pedagogy of the excellent settings encourages children to initiate activities as often as the staff. Also, staff regularly extended child initiated activities, but did not dominate them. The children in reception classes experienced a different balance of initiation, with a much greater proportion of staff initiated episodes. In all of the case study settings children spent most of their time in small groups. But observations show that 'sustained shared thinking' was most likely to occur when children were interacting 1:1 with an adult or with a single peer partner. Freely chosen play activities often provided the best opportunities for adults to extend children's thinking. Adults need, therefore, to create opportunities to extend child-initiated play as well as teacher-initiated group work, as both have been found to be important vehicles for promoting learning.

The findings reveal that level 5 qualified staff (almost all trained teachers) provided children with more experience of academic activities (especially language and mathematics) and they encouraged children to engage in activities with higher cognitive challenge. While the most highly qualified staff also provided the most direct teaching (instruction through demonstration, explanation, questioning, modelling etc) they were the most effective in their interactions with the children, using the most sustained shared thinking. Furthermore, less well qualified staff were significantly better pedagogues when they worked alongside qualified teachers.

Differentiation and formative assessment

The analysis of teacher observations suggests a positive association between curriculum differentiation, formative assessment, and the process of selecting activities to provide the optimum cognitive challenge, and sustained 'shared thinking'. The practice of adults 'modelling' (or demonstrating) positive attitudes, behaviours, and appropriate use of language, has also been identified as a valuable pedagogic strategy to be employed in early childhood. The best case study settings kept good records and engaged with parents about their child's progress on a weekly or monthly basis. However, there was little evidence of detailed formative feedback to children during tasks.

Discipline and adult support in talking through conflicts

The excellent settings adopted discipline/behaviour policies that involve staff in supporting children in rationalising and talking through their conflicts. In other words, a more problem solving approach was taken. Three settings with very positive social and behavioural outcomes had this practical approach supported by a strong behaviour management policy with which all the staff were conversant. In settings that were less

⁴ The process where early years educators provide a 'model' in terms of their language, behaviours, skills and/or attitudes for young children to imitate.

effective in this respect, observations showed that there was often no follow up on children's misbehaviour or conflicts and, on many occasions, children were 'distracted' or simply told to stop.

Parental partnership

The case studies indicate that where a special relationship in terms of shared educational aims has been developed with parents, and pedagogic efforts are made by parents at home to support children, sound learning can take place even in the absence of consistently good pedagogic practice in the pre-school setting. The excellent settings shared child-related information between parents and staff, and parents were often involved in decision making about their child's learning programme. This level of communication was particularly the case in private day nurseries. While settings providing for the needs of children from the higher socio-economic groups benefited especially from this, the potential benefit of adopting a combined approach (good pedagogic practice within the setting and support for the home learning environment) in settings serving more disadvantaged areas is also clear.

In more disadvantaged areas, staff in settings had to be proactive in influencing and supporting the home education environment in order to support children's learning. The evidence suggests that the 'excellent' settings in disadvantaged areas recognise the importance of, and were pro-active in encouraging strong parental involvement in the educational process, by taking the time to share their curriculum, pedagogical strategies and educational aims with parents. They offered advice on how parents could complement this within the home learning environment and how this impacted on young children's development.

Pedagogy

Whilst this report describes the pedagogy in a limited number of Foundation Stage settings, more detailed information on reception class practices, childminders and the Foundation Stage curriculum is reported in the Researching Effective Pedagogy in the Early Years (REPEY) Project report (see Siraj-Blatchford et al 2002).

Knowledge of the curriculum and child development

The case studies show that practitioners' knowledge and understanding of the particular curriculum area that is being addressed are vital. A good grasp of the appropriate 'pedagogical content knowledge'⁵ is a vital component of pedagogy and is just as important in the early years as at any later stage of education. Even in

these 'good' and 'effective' settings, there were examples of inadequate knowledge and understanding of curriculum areas, especially in the teaching of phonological skills and science.

The study shows that early years staff may need support in developing their pedagogical content knowledge in the domains of the Early Learning Goals. Educators who demonstrate good 'pedagogical content knowledge' display a firm knowledge and understanding of their curriculum content, but crucially, the most 'effective' educators also demonstrated a knowledge and understanding of what part of that content was most significant and relevant to the needs of the children that they were teaching. They were also able to draw upon knowledge of the pedagogical strategies found to be most effective in teaching any particular content.

Summary

In summary, effective pedagogy in the early years involves both the kind of interaction traditionally associated with the term "teaching", and also the provision of instructive learning environments and routines.

The 'excellent' settings provided both teacher-initiated group work and freely chosen yet potentially instructive play activities. Children's cognitive outcomes appear to be directly related to the quantity and quality of the teacher/adult planned and initiated focused group work for supporting children's learning. The research findings support the general approach taken in Curriculum Guidance for the Foundation Stage (CGFS 2000). The settings that viewed cognitive and social development as complementary managed to achieve the best outcomes for children. Trained teachers were most effective in their interactions with children, using the most sustained shared thinking interactions. Less well-qualified staff were better pedagogues when qualified teachers supported them.

Methods and timetable

In conducting the case studies, trained researchers, who were already familiar with the centres, spent two whole weeks in each centre. Case study data came from multiple sources to allow for assessment by source and the method of data collection. Data from policy documents was triangulated with manager and parent interviews, extensive naturalistic observations of staff (over 400 hours) and systematic focal child observations of children (254 target child observations).

Some of the data for the case studies were collected prior to the announcement of a Foundation Stage (FS) in late 1999 and during 2000 and some information from all the centres of the FS during 2001/2 when further

⁵ Different pedagogic techniques are often required to make different forms of knowledge, skills and understanding accessible to young children. In teacher education the identification of appropriate strategies is often referred to as 'pedagogical content knowledge'. Requires knowledge of the 'subject' being taught and the child's level of learning.

funding was made available for the REPEY study. The Foundation Stage covers provision for children aged 3-5 years-old.

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Additional information

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