SESIE Special Issue EDITORIAL: Educational Effectiveness Approaches in
Early Childhood Research across Europe

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Document Word Count: 2142
Educational Effectiveness Approaches in Early Childhood Research across Europe

Despite the last 10-15 years seeing a surge in the volume of early childhood research that has been funded, conducted and reported on, much of this has been generated by American researchers and based on samples drawn from the USA (e.g. (NICHD ECCRN, 1998, 2004, 2005)). Moreover, the usefulness of such research for policy makers, practitioners, researchers, and parents outside of the USA is limited because the form, structure, and funding arrangements of early childhood education and care are all well-known to vary enormously from country to country. In addition and until recently, there has also been little attempt to adopt an educational effectiveness perspective in early childhood research - particularly that involving pre-schools. This stands in contrast to the tradition of research on schools and teachers such as that from the fields of ‘school effectiveness’ and ‘teacher effectiveness’.

The infrequency of recent and historical early childhood research that has adopted an educational effectiveness design is even more surprising given that over two decades ago, (McCartney & Jordan, 1990) suggested a increasingly close alignment of research into the effects of child care and schooling. They argued that although investigations within these two areas had developed separately, as of 1990 they were showing strong similarities in terms of their foci on three broadly-equivalent research questions that had been investigated over three parallel phases:

1. An Early First Phase – *does the educational environment matter?*
2. A Second phase – *what matters?*
3. A Third phase – *what matters for which types of children?*

Partly in response and partly as an attempt to foster international comparisons, this special issue presents research from several leading European studies which have all investigated the subtle and long-term effects that are linked to a childhood experience of early years care and education. Further, all of these investigations conduct research and ask questions that are relevant to the educational effectiveness research community and that link with the three phases presented above. Two longitudinal observational studies feature prominently:

1. The English Effective Preschool, Primary, and Secondary Education (EPPSE) project, and 2.
The German investigation titled ‘BiKS’ [*Bildungsprozesse, Kompetenzentwicklung und Selektionsentscheidungen im Vor- und Grundschulalter*]¹.

The EPPSE project (1997+) (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2004, 2008) follows the development of more than 3000 children who were first assessed at the start of pre-school (around the age of 3). These children then had their progress measured at key time points (school entry at age 5 years, then at ages: 6, 7, 10, 11 and 14 years) all the way until the end of compulsory education at age 16+. This longitudinal tracking of progress is conducted within an 'educational effectiveness' design that establishes the preschool (3-5 years), primary (5-11 years) and secondary school (11-16+ years) factors that are most related to children’s progress.

The BiKS investigation (2005+) was set up to shed light on how learning environments at home, at preschool and at primary school differentially influence children’s development. The sub-study BiKS 3-10 follows the acquisition of competencies of 547 children in Germany who attended 97 preschool settings in two federal states since 2005 (von Maurice, et al., 2007). The children entered the study in their first year of preschool. Cognitive and social skills were measured each year. In addition the BiKS team collected a wide range of information on the background of families, the home learning environment and the qualities of the preschools and primary schools that were attended. This study design permitted the investigation of differential influences of learning environments at home, at preschool and at primary school (Anders, et al., under revision).

Although each paper within this special issue stands alone, reading the articles in a linear order may prove beneficial because latter papers examine increasing complex and/or long-lasting educational effects. For example, the first half of this issue presents papers that consider the educational effectiveness of early years education before age 8 years while the second half considers effects that last beyond 7 years of age. At the same time, papers that consider the direct effects of education are presented before papers that hypothesise effects that vary by context and/or for different categorisations of children. However, this progression to the articles aside, there are also a number of themes that are consistent across all of the papers. These include:

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¹ Translated into English, “Educational processes, competence development, and selection decisions at pre-school and primary school age”
1. That the longitudinal/repeated measurement of child development/progress is key to unravelling the effectiveness of early childhood education.

2. That when attempting to reliably document the effectiveness of educational provision in the early years, it is important to consider the characteristics of children, parents, and the home and educational environments at the same time.

3. That it is helpful to differentiate child-outcomes according to: child cognitive skills, child academic performance, and child social/behavioural skills.

4. That the social interaction of children with adults (parents and/or pedagogues) is central to any reliable understanding of the effectiveness of early years education.

5. That the effectiveness (or otherwise) of various forms of educational provision in the early years strongly depends on the quality of this provision.

Considering each of the papers in more detail, the first paper (by Ebert and colleagues) analyses data from the BiKS 3-10 project to consider the drivers of 547 children’s vocabulary development between the ages of 3-5 years. Results reinforce the importance of adult-child communication by demonstrating that children from non-German-speaking households demonstrate poorer vocabulary development than do children from German-speaking households. Further, the size of this effect is reported as larger than those offered by the other characteristics of either children’s home environment or the preschool they attend.

This emphasis on the importance of adult-child interactions is further demonstrated in another context by the second paper (by Hall and colleagues) which reports on a secondary analysis of the EPPSE dataset. The cognitive and social development of 2,821 children is followed between the ages of 3-5 years with consideration paid to child, home and preschool characteristics. Parent-child and caregiver-child (preschool process quality) interactions are revealed to be stronger predictors of developmental catch-up than are other parent and preschool characteristics (structural qualities). Hall et al., go on to conclude that higher-quality preschool has the potential to offer partial protection of the development of at-risk children.

The third paper in this special issue also explores the impact of adult-child social interactions (via teacher-managed learning activities) but also goes a step-further with the simultaneous consideration of early years classroom composition. In this paper by de Hann et al, 91 Dutch children had their emergent academic skills followed between 3-6 years of age with
children from socioeconomically mixed preschool and kindergarten classrooms performing better in literacy and maths than children within targeted classrooms.

The fourth (Anders and colleagues) and fifth (de Bilde and colleagues) papers in this special issue examine child development beyond age 5 years and compare the impacts of different forms of education. The paper by Anders et al reports on an analysis of the BiKS study data and the development of 547 children’s early numeracy between 3-7 years of age in Germany. The authors investigate preschool and primary school influences controlling for various family and child characteristics such as the socioeconomic status and the quality of the learning environment at home. Comparing the effects of pre-school to primary school, preschools that offered higher quality processes (including more stimulating adult-child interactions) were found to have beneficial effects on the development of children’s numeracy skills that were evident over and above the effects of primary school.

In contrast to the paper by Anders and colleagues, the paper by de Bilde et al compares the effects of traditional versus alternative (Freinet and Waldorf) forms of early education that are on offer in Flanders, Belgium. This study is based on 2,776 children whose non-cognitive development was assessed between 5-9 years of age. Compared to the children who attended traditional forms of early education, children who attended either a Freinet or Waldorf school were found to have significantly lower levels of independent functioning. However, the authors also report that attending an alternative form of early education lessens the importance of children’s initial level of achievement when considering long-term school enjoyment and independent functioning.

The sixth (Sylva and colleagues) and seventh (Sammons and colleagues) papers in this special issue both report on the EPPSE study and document developmental effects of early education that last until child age 11 years. The sixth paper by Sylva et al compares the educational impact of 2,800 children’s early home learning environments against the overall quality of the preschools that they had attended. A long-lasting beneficial cumulative effect (between 7-11 years) is identified from experiencing not only a richer quality home, but also a higher-quality preschool.

The final (seventh) paper in this special issue is the most explicit in its focus on educational effectiveness and again consists of an analysis of the EPPSE data. Sammons and colleagues consider the academic attainment and self regulatory skills of 2,664 children between the
ages of 6-11 years and ask whether attending a more academically effective primary school can prove protective against a prior experience of multiple-disadvantage from birth to age 5 years (developmental risk). Two forms of partial-protection are evidenced. First, attending a more academically effective primary school (in terms of maths, English, and science) for just a single year (normally between ages 5-6 years) was found to lessen the direct impact of disadvantage on maths, English, and self regulation. Second, further indirect protection is then noted up to age 11 years (at the end of primary school): Entering primary school with poorer cognitive and self regulatory skills was less predictive of ultimate attainment for children who attended primary schools that were identified as more academically effective.

Drawing together the conclusions made by these studies, it is clear that there remains a strong necessity for more cross-cultural research in the area of early years education, and that educational effectiveness approaches to research in this area are likely to prove fruitful. Ideally, such research would see the differences in early years provision (across countries) as a resource allowing for the advancement of knowledge concerning the possible effects of early education and care rather than as a barrier in the application of the research from one country/culture to another.
References


