Pedagogy in early childhood education and care (ECEC): an international comparative study of approaches and policies

Research brief

July 2015

Stephanie Wall, consultant
Ineke Litjens, OECD
Miho Taguma, OECD
Background

The debate about what constitutes effective pedagogy in ECEC has received increased attention in recent years, due to the acknowledgement in recent research (such as in Heckman, J.J. (2006), “Skill formation and the economics of investing in disadvantaged children”) that high quality early childhood education and care (ECEC) offers immense opportunities for all children, regardless of background, to develop the cognitive and social and emotional skills needed for their development, well-being and success in later life. Many countries, including England, have expanded their ECEC services and emphasised the educational potential of this sector through improvements to staff qualifications, curricula and quality assurance processes.

This review aims to provide an improved understanding of the range of pedagogical practices within early years' settings across the world, and the policies that impact the choice and implementation of different pedagogies. Comparisons are made between the pedagogical approaches in early years' settings in England and those in equivalent Early Childhood Education and Care (ECEC) settings in: Japan, France, Germany, Denmark, and New Zealand alongside discussion on how policy levers can be used to influence current practice.

Three research methods were incorporated in the study. The latter two sources include countries' self-reported practices on monitoring quality and pedagogy.

- A literature review on ECEC pedagogy conducted by researcher Dr. Yvonne Anders, in which England is compared with Japan, France, Germany, Denmark, and New Zealand;
- An international OECD survey on countries' monitoring of quality in ECEC;
- A joint OECD-England international survey on pedagogy in ECEC.

The review begins by explaining why pedagogy is important and how it is defined; it then describes variations in, and evidence for, pedagogical approaches in formal ECEC settings this is followed by an overview of how pedagogy is monitored internationally; finally, the report offers some insight into the policy levers that affect pedagogical practice.


---

1 The following 24 countries responded to the survey on monitoring quality: Australia, Belgium – Flemish Community, Belgium – French Community, Chile, Czech Republic, Finland, France, Germany, Ireland, Italy, Japan, Kazakhstan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Slovak Republic, Slovenia, Sweden, United Kingdom – England and United Kingdom – Scotland.

2 The following 21 countries responded to the survey on pedagogy: Belgium – Flemish Community; Chile; Denmark; Estonia; Finland; France; Hungary; Ireland; Israel; Italy; Japan; Kazakhstan; Korea; Luxembourg; Mexico; New Zealand; Norway; Slovak Republic; Slovenia; Sweden; and United Kingdom – England.
Definition of Pedagogy

Pedagogy relates to the “how”, or practice of educating. It refers to, “that set of instructional techniques and strategies which enable learning to take place and provide opportunities for the acquisition of knowledge, skills, attitudes and dispositions within a particular social and material context. It refers to the interactive process between teacher and learner and to the learning environment” (Siraj-Blatchford et al. 2002). It concerns the “how” of adult and child interaction, whilst recognising that how children learn and develop at this stage is not just subject to what is intended to be taught, but it is also of particular importance how it is facilitated.

International studies recognise that children’s capabilities are shaped by the quality and range of early experiences and interactions in both the home and ECEC environment. Experiences of young children in ECEC settings are defined by process quality. Process quality refers to the nature of the pedagogical interactions between ECEC staff and children, as well as interactions between peers, and with their environment. Research has shown these interactions and experiences are one of the most significant factors explaining the effects of care and early education on children’s learning and development.

Key findings

England’s pedagogy has several strengths. Firstly, England’s pedagogical approach, as outlined in the curriculum, puts emphasis on age-appropriateness and play in pedagogy, and encourages staff to employ different approaches and practices flexibly. Secondly, along with Denmark, German Länder and New Zealand, England promotes continuous child development for the whole ECEC age range due to implementation of one over-arching curriculum framework. Thirdly, England has favourable staff-child ratios in place that can positively impact pedagogy. The regulated number of children per practitioner (or staff-child ratio) can influence how much time practitioners can spend per child. With a higher number of children per staff, conditions for individualized attention and interaction with children are less favourable. England and Finland have the most favourable staff-child ratios in place for children below the age of three. England’s staff-child ratio of 1:8 to 1:13 (depending on staff qualifications) for preschool-aged children aged three and older is better than the OECD average, but less beneficial than New Zealand’s ratio or the regulated ratio in many German Länder. Finally, there is a strong monitoring system in place which even monitors process quality. Only England, German Länder, and New Zealand monitor process quality or pedagogical quality in particular. The scope of monitoring process quality in Germany and New Zealand is broader than in England, including aspects such as the overall quality of teaching/instruction/caring; relationships and interactions between staff and children; collaborations between staff and parents, management, or between colleagues; pedagogy; and implementation of curriculum by staff.
Research suggests that specific pedagogical approaches do not have better outcomes than more general pedagogical ones. In general, research has revealed a mixed picture in terms of the impact on children’s outcomes of approaches with a specific pedagogical programme, such as Montessori or Steiner. That said, it is necessary to point out that research evidence and studies considering the exact same approaches in the exact same context are very limited. Studies indicate that approaches that adhere strictly to a specific type of pedagogy do not always result in better child outcomes compared with programmes that take a less prescriptive approach. For instance, evaluation of Developmentally Appropriate Practice (DAP) has found no direct effects on academic outcomes, although it was found to have positive impacts on children’s ability to initiate and maintain interpersonal relations, and in the long-term on children’s motivation and interest in learning. Implementation of the Montessori approach demonstrates greater gains in, for example, reading, math and social problem solving, although the effectiveness is conditional on good implementation fidelity. Alternative educational programmes such as Steiner and Freinet have been found to not be any more effective in fostering children’s development than mainstream programmes.

England and the case study countries examined for this report do not adhere to one certain pedagogical approach at national level. Different theories underpin or contribute to countries’ pedagogical principles; policies and guidance are usually based on a combination of ideas of well-known theorists, even if the links are not explicitly made. In an international survey on pedagogy, the theories of Piaget and Vygotsky, for example, are frequently mentioned to have influenced pedagogy and curriculum in England, Germany, France and New Zealand. The Montessori approach has influenced pedagogy in Germany and Japan, and the following theories or theorists have been of influence elsewhere: Developmentally Appropriate Practice or DAP (Japan), Reggio Emilia (Japan), Bronfenbrenner (New Zealand), Rogoff (New Zealand), Bruner (France), Freire (Germany), Robinson (Germany) and Zimmer (Germany), as well as Humboldt (Germany) and Fröbel (Germany).

In practice, settings can employ a combination of pedagogical approaches, since countries do not subscribe to one exclusive approach at national level. Despite this diversity in theories and practice, some pedagogical approaches can be thought of as more common across OECD countries. A child-centred approach is popular and implemented in England, Denmark and Germany. The constructivist/interactive approach is also commonly practised (in England, France and Germany for instance). New Zealand employs a pedagogical approach with a strong socio-cultural perspective. Less common approaches tend to be implemented in just one country, such as the Theory of Three activities used in Japan, which specifies three layers of activities that focus on children’s free play, guided play and teacher-instructed play.

Certain pedagogical practices can better stimulate children’s development. Firstly, research suggests that the quality of interactions between adults and children plays a highly important role in stimulating early learning. In high quality interactions, adults are genuinely interested in what the child is doing; adults are listening, are extending
children's thoughts and knowledge (i.e. scaffolding), and implement sustained-shared thinking methods where children co-construct meanings and interpretations of reality together with supportive adults. In settings where sustained shared thinking was enacted more frequently, children have been noted to make greater developmental progress. Scaffolding-focused learning environments, where the practitioner only attempts to help the child with tasks that are just beyond the child's current capability, demonstrated greater overall positive effects on children's development compared to children placed in more teacher-directed and child-centred environments.

Secondly, play-based learning is found to be a highly effective method in enhancing children's socio-emotional and academic development. Play has found to mostly contribute to a child's development when it is regarded as meaningful, i.e. has the explicit purpose to learn a child something such as a puzzle or constructional materials. Research indicates that unguided free play is often less effective in stimulating early learning as compared to guided free play.

Different research findings suggest that, thirdly, pedagogy should neither be too staff-directed or staff-focused with a high share of staff-initiated activities, or too child-centred where children decide on the activities. While studies on staff-directed approaches have revealed some advantages such as better letter and reading achievement, this approach negatively affects children's motivation to learn. In France, it was found that highly teacher-directed pedagogical practices were less effective. In Germany, the implementation of a child-centred pedagogy, in combination with specific teacher-managed activities and a high level of assistance, stimulates the development of academic skills such as numeracy and literacy, and children also demonstrated higher levels of well-being and motivation to learn. Research in the US also found that mixed teacher- and child-managed activities are associated with alphabet and letter–word growth, and purely child-managed experiences, including play, were associated with vocabulary growth.

**England's and other countries' pedagogical practices differ due to large flexibility in implementation.** Some form of pedagogical guidance is provided in or alongside the national curriculum framework in all countries included in the study. Since countries have different cultural and historical contexts, guidance on pedagogical approaches and practices naturally differ. None of the case study countries practice one sole pedagogical approach or practice because pedagogical approaches and practices are not explicitly stipulated by the national government, but the decision on the pedagogical approach (and practices) used, is decided at setting or staff level. Practitioners and settings are free to choose the pedagogical practices they adhere to and implement (France being the exception with more strict pedagogical guidance). Hence pedagogical approaches are only guided by the countries, in order that practitioners adapt the curriculum and pedagogical approaches to accommodate the needs of different children accordingly. But some commonalities can be found.

Despite the large variety and flexibility in implementation of pedagogical practices, some similarities can be found. Curricular guidance often advocates (structured) play-based
learning (France being the exception with a less strong focus on play) and a mixed method approach of child-centred and staff-initiating practices (Denmark and Germany being the exceptions with a strong emphasis on child-initiated practices). In addition, all countries indicate it is important to meet children’s individual needs, and they all have a belief that children learn and develop in different ways. Hence, age- or developmentally appropriateness is regarded as important in pedagogy.

In 2008, England developed a best practice guidance booklet based on research (the Practice Guidance for the Early Years Foundation Stage (2008)). England’s child-centred approach with a mix of pedagogical practices is reflected in the pedagogy guidance document, which emphasises sustained shared thinking and scaffolding practices, where the practitioner helps the child master a task or concept that the child is initially unable to grasp independently and offers assistance with only those skills that are beyond the child’s capability, as effective in stimulating early child development. England’s DfE is one of few government departments to have based their national pedagogical guidance for staff on practices which have been researched in their own country. New Zealand has carried out something similar, although their best practices are listed as examples online. Many other countries do not conduct any research on pedagogical effectiveness.

**Potential areas for reflection**

The potential areas for reflection for England include the importance of maintaining a child-centred and developmentally appropriate approach while adapting practices to the increasingly diverse needs of the ECEC population.

Research indicates that it is important that pedagogy remains child-centred, and developmentally appropriate, with an emphasis on play-based learning. The implementation of different curricula at different stages can affect whether this is achieved. The Early Years Foundation Stage (EYFS) in England is distinct to the national school curriculum and the transition between the two curricula is facilitated by the early years curriculum being adopted in school reception classes for children aged four to five. This helps children become familiar with school and more formal learning. Key Stage 1 is the first part of the national school curriculum for children age five to seven, and this stage introduces academic subjects more formally by building on what has been learnt in the EYFS.

Further challenges for pedagogy include the diversification of the population in many OECD countries. Because societies are becoming more diverse due to an increase in immigrant children in ECEC and school settings who have different cultural and linguistic backgrounds, early education practitioners need to be prepared to work with more diverse groups of children, with different cultural, socio-economic and linguistic backgrounds. As a result, pedagogies need to be adapted to the possibly diverse set of needs of these children.
© OECD [2015]

Reference: DFE- RB400


This research was commissioned under the 2010 to 2015 Conservative and Liberal Democrat coalition government. As a result the content may not reflect current Government policy.

The views expressed in this report are the authors’ and do not necessarily reflect those of the Department for Education.

Any enquiries regarding this publication should be sent to us at: Emily.KNOWLES@education.gsi.gov.uk or www.education.gov.uk/contactus

This document is available for download at www.gov.uk/government/publications