



SCOTTISH EXECUTIVE
Education Department

Insight 28

**Early Years Education:
Perspectives from a review
of the international
literature**

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ISSN 1478-6796 (Online)

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Early Years Education: Perspectives from a review of the international literature

Dr Christine Stephen, Institute of Education, University of Stirling

Introduction

This review was commissioned at a time when a national process of education reform for children aged 3–18 was under way and revision of the existing curriculum guidance for children aged three to five was being considered. The review aims to point to examples, raise issues and look critically at evidence but makes no claims to be exhaustive. We set out to address three key questions:

- What kind of educational experiences are offered in early childhood and what evidence is there of the impact of early years education?
- Is early years education a distinct phase in the education system?
- How are decisions made about when children should have particular educational experiences?

The concern throughout was with educational provision that is developmentally and culturally appropriate for young learners. The focus of attention was ways of working with children and supporting their learning (regardless of institutional setting).

Review Methods

Our search was international, although limited to paper and electronic publications and grey material available in English since 1995. We included systematic reviews, documents summarising international debates or collations of practice guidelines and empirical studies.

For the purposes of this review:

- *Early years education* refers to group out-of-home provision based on an explicit curriculum designed to support the development and learning of young children
- *Practitioner* is the term used to refer to the adults who work directly with children in early years settings
- *Curriculum* is used to describe a way of structuring learning experiences or an organised programme of activities
- *Pedagogy* is defined as any activity undertaken to promote learning. It encompasses both the direct actions that practitioners undertake e.g. modelling, questioning and indirect activity such as planning, observing and recording.

What kind of educational experiences are offered in early childhood and what evidence is there of the impact of early years education?

Aims and expectations for early years education

The kinds of educational experiences offered to young children reflect the aims and expectations of society in general, and of practitioners and policy makers in particular. Ideas about children, childhood and learning and socio-political perspectives on the purpose of educational provision in the early years influence curriculum decisions and the outcomes anticipated.

Although generalised aims such as 'promoting development' and 'fulfilling potential' are common, the ways in which children, childhood and learning are thought about vary between nations and make a difference to the early years experiences offered. For instance, in Korea the Confucian tradition is evident in the emphasis on whole-class

teaching and the authority of the teacher in early years settings. In the UK the focus on independence and autonomy reflects a more liberal tradition. Imaginative play is widely endorsed but some societies prefer children to learn through participation in real world tasks. In Europe and North America there is a debate over whether young children should be protected from the intrusion of information and communications technology or will benefit from early exposure to these new technologies.

Theories about how children learn and develop also influence practice and thinking about learning. Piaget's stage theory of development has had a powerful influence despite being subject to considerable critique and modification by later studies. More recently, socio-cultural theories of learning have focused attention on the influence of the contexts in which children learn and the crucial role of adults and peers as mediators of learning. Attention has turned to neuroscience for ideas about promoting learning but the consensus of opinion is that there is still a considerable gap between understanding how the brain functions and findings that can be applied in educational practice.

A cluster of values and principles underlie early years education in Europe and North America, regardless of the type of institution or the particular curriculum or pedagogy adopted:

- a focus on individual development
- an emphasis on child-initiated not adult-directed learning
- learning is co-constructed with adults and peers
- children are active agents not passive recipients
- a view of children as competent learners rather than immature adults
- listening to and respecting children and their choices
- learning is shaped by context and community.

Another consistent theme running through thinking about young children's learning is the positive value of play. However, it should be noted that the efficacy of play as a medium for learning is more often asserted than evidenced and our understanding of the role of play is limited.

Social, political or economic perspectives can give rise to expectations about the outcomes of education in the early years which will in turn influence decisions about the nature of provision and the kind of experiences that children have there. Early years education is sometimes thought of as a way of building future benefits for society and reducing social and economic burdens through specific intervention programmes to prevent later academic failure. When early education is associated with childcare that allows mothers to go to work it can be seen as offering opportunities to break cycles of deprivation and reduce poverty.

The curricula developed for children in their early years are concerned with sharing and developing a society's values and morals. In some countries the national curriculum includes goals and expectations concerned with promoting particular forms of social interaction or governance. For instance, the Swedish curriculum aims to help children understand and begin to participate in democratic government. The positive value attached to inclusive practice in the UK is evident in the curriculum guidance for early years education in both England and Scotland. Elsewhere, aims for early years education include support for social cohesion, national cultural identity, respect for diversity or promotion of bi- or multi-culturalism.

Alternative Approaches to the Curriculum

Formal early years education curriculum guidance is typically concerned with children from about three years old until school entry, although the degree to which

What is it about play that is important for early years education in Scotland?

What are our aims and expectations for early years education in Scotland?

the guidelines are considered to be prescriptive varies across countries. A review of 20 countries found that most used areas of learning to structure the curriculum rather than subjects/disciplines and there was general agreement on the areas of development to be addressed:

- social and emotional
- cultural, aesthetic and creative
- physical
- environmental
- language, literacy and numeracy.

Developmentally Appropriate Practice (DAP) represents the consensus view on curriculum and pedagogy in the USA and the UK and has had a formative influence world-wide. The key characteristics of DAP are:

- a balance between children's self-initiated learning and practitioner guidance
- opportunities for children to make meaningful choices between activities offered
- scope to explore through active involvement
- a mix of small group, whole group and independent activities
- play as a primary (but not the exclusive) medium for learning
- adults who demonstrate, question, model, suggest alternatives and prompt reflection
- systematic observation of children's learning and behaviour.

Experiential Education (developed by Laevers and associates) focuses on the process of education and is based on the principle that there are two key dimensions to high quality:

- provision ensures children's emotional well-being (including their needs for security, affection and moral values)
- practitioners stimulate a level of involvement in children that supports deep-learning through sustained concentration, intrinsic motivation and working at the limits of existing understanding (in the Zone of Proximal Development).

This understanding of early years education demands that practitioners should stimulate children, be sensitive to individuals and give autonomy to learners. The Experiential Education model has been adopted by Pascal and Bertram as the basis for the Effective Early Learning (EEL) project used widely in England to support the evaluation and development of good quality practice.

The *High/Scope Curriculum* originated in the USA where it was developed as part of a targeted early intervention project. The central tenet of the High/Scope approach is that children learn best through active experiences and following their own interests, rather than through direct teaching. As children make choices they become 'naturally' engaged in what the curriculum developers call 'key experiences'. High/Scope has identified 58 key experiences for child development in the early years arranged in five groups:

- creative representation
- language and literacy
- initiative and social relations
- movement and music
- logical reasoning.

Implementing a High/Scope curriculum requires a particular pedagogical approach: materials are arranged for independent use; there is a consistent routine in the playroom; children plan their activities for each day, have time for these activities and are helped by adults and peers to reflect on their activities. A number of studies have

demonstrated positive outcomes for children who experience High/Scope but the most well known and widely reported of these suggests that, when compared at age 27 to children from similar backgrounds, those who had been randomly allocated to the intervention programme of which High/Scope was a major part had higher earnings, less criminal behaviour, completed more years of education and were more likely to own their home.

The *Reggio Emilia* approach has received worldwide attention. It sets out to offer children the opportunity to build thinking relationships between people, ideas and the environment, drawing on expressive, communicative and cognitive languages. The focus is on each child constructing his/her own understanding through reciprocal interactions with others and resources, particularly creative resources. Developing learning competencies is at the heart of the approach and the aim is that through dialogue and communication (spoken language, drawing, constructing models, drama, music etc.) children will develop their capacity to think, build and test theories.

The Reggio approach has developed a distinct pedagogy that places the emphasis on using multiple forms of expression to help children articulate their understanding and thinking, sustain their interest and research and give value to these activities as they are shared with others, particularly parents. Practitioners see themselves as guides who are learning with the children and adopt a listening role that seeks to encourage thinking, negotiation and the exploration of difference, particularly in collaborative group work. Documenting the process of exploration as children work through a project is a key pedagogical activity which offers children a record of their progress through the project, gives educators a detailed insight into children's activities and learning and makes the process visible to parents and the community.

Te Whariki is the first national early childhood curriculum in New Zealand. It adopts a specifically socio-cultural perspective on learning that recognises the different social contexts in which children live and seeks to promote bi-culturalism and nurture learning dispositions. There are five strands to the curriculum

- wellbeing
- belonging
- contribution
- communication
- exploration.

Within each strand developmental, cultural and learning goals have been articulated. *Te Whariki* tasks practitioners with supporting children to achieve these goals through the environment and activities they provide and in ways that are culturally appropriate. Play is not given the same priority as in some other early years curricula but having opportunities for spontaneous play and play that supports meaningful learning is included as a curricular goal.

Evidence on the impact of early years education

There is little convincing evidence of the impact of experiencing a particular curriculum or pedagogical approach. This is probably unsurprising given the importance in learning of adult-child relationships, children's temperament, social-economic factors and cultural traditions. Furthermore, what research evidence does exist about the impact of curricular experiences tends to be limited to outcomes for children in particular circumstances or for literacy and numeracy, with little evidence at all relating to other areas of knowledge and development such as technology, arts, religion and morality. Added to the paucity of studies are the difficulties of assessing the holistic and dispositional goals that characterise much of early education.

Studies evaluating the High/Scope curriculum suggest it can make a difference to outcomes in later life, although the outcomes were more social and economic than academic and the curriculum these disadvantaged children experienced was just one part of an intensive intervention programme. In general, studies of model or targeted programmes suggest that children who attend do experience positive outcomes but the evidence as to the nature of these outcomes is unclear. Some studies suggest cognitive advantage, others social benefits and some improvements in well-being.

The evidence from a longitudinal study in the USA points to both advantages and risks being associated with the quality, quantity and type of early care and education that children experience. Higher quality provision predicted better pre-academic skills and language but spending more time from birth in early years settings was associated with behavioural problems just before entry to school (regardless of the quality of provision). A longitudinal follow-up of this study found that these advantages and disadvantages lasted throughout the primary grades. Recent evidence from children in England who attended provision available to the general population (rather than model programmes) suggested that although individuals did make developmental gains while attending early years settings, the gap between children in affluent and deprived neighbourhoods on measures of mathematics and language was not reduced.

Numerous investigations suggest that the impact of early education depends on the quality of the provision and learning opportunities offered to children. Quality has been considered in terms of care routines, adult-child interactions, learning activities provided, practitioner training and adult:child ratios. The Effective Provision of Pre-School Education (EPPE) project offers the best evidence to date of the effect of pre-school education in England and Wales. Among the extensive findings EPPE concluded that:

- Attending pre-school improves children's intellectual and social/behavioural development. Children who did not attend had poorer cognitive attainment, sociability and concentration when they began primary school.
- Full-time attendance did not lead to better outcomes for children than part-time provision.
- Disadvantaged children benefited significantly from good quality pre-school experiences, reducing the effects of social disadvantage.
- The beneficial effects of pre-school remained evident through the initial years of primary school (ages six to seven).

In the context of this review the EPPE project findings about the influence of the ways in which practitioners worked with children are particularly pertinent.

- Where practitioners were warm and responsive to children's individual needs progress was enhanced.
- Children's progress was greater in settings where staff had higher qualifications.
- Progress in reading and maths at age six was better when children had attended settings where provision for literacy, maths, science/environment and catering for diversity was of high quality.

Is early years education a distinct phase in the education system?

Evidence from developmental and cognitive psychology offers some endorsement for the distinctiveness of early years educational provision. The international early years literature suggests that practitioners, policy makers and parents recognise and respond to the need for a distinct type of learning experience to be offered to children from about three years of age until they begin primary school. In some countries this phase is thought of as part of lifelong learning in a state-funded education system. Elsewhere it is seen as a special resource for children that proceeds, but is not directly related to,

What lessons are there from the findings of the EPPE project for Scotland? To what extent is practice in our early years settings like the model of effective provision that emerges from EPPE?

compulsory schooling or as a response to parental demands or government concerns about economic or educational competitiveness.

Despite the difficulties of making international comparisons several points are clear:

- Early years provision is commonly divided into two periods, from birth to three years olds and from three years old until the beginning of compulsory school.
- Most countries do not have centralised guidelines detailing specific educational provision from birth to three and there is general agreement that children younger than three should be receiving care and learning experiences tuned to their wide ranging individual needs and not be subject to a prescriptive agenda.
- There is widespread agreement that children from three years until about six years old can benefit from educational experiences that foster social and intellectual development and promote positive learning dispositions.
- As they move into primary school education children usually experience some curricular and pedagogical discontinuities although there is international interest in ways of supporting this transition.

There has been relatively little research and writing on the relationship between the learning and care experiences of children under three and the typical early years phase. Children move to early years educational provision with varying experiences of maternal and non-maternal care. At this transition point the focus has traditionally been on issues of emotional separation from mother or other main carer. However, one study suggests that it is a more complex process and that there is scope for further research and development of practice to ensure that children's social, emotional and learning needs are identified and met as they move into early years settings.

Has the focus on smoothing organisational aspects of the transition from early years education to primary school meant that the challenges of a change in pedagogy and curriculum have been given insufficient attention?

Transition to primary school has been the focus of considerable international research activity and policy innovation yet it remains a topic of concern. Considerable attention has been paid to organisational features that may make transition to school easier for young children, such as, arranging familiarisation visits or passing on information about individual children. While there is some evidence from teachers that participation in transition activities is beneficial it remains an open question from the child's perspective. There is scant evidence of any advantage from the considerable efforts to develop new ways of transferring information about children from early years settings to primary school. Studies examining the impact of children's personal characteristics on their experience of transition to school argue for the importance of meeting individual needs rather than concentrating on a process of 'fitting in'.

Some countries have attempted to overcome the discontinuities children experience when they move from early years education to primary school by designing curricula with explicit links across provision for different age groups or continuing the early years curriculum into the first years of primary school. While these bridging initiatives offer benefits in terms of continuity they are vulnerable to pressures from the different contexts in which they operate, particularly the focus on attainment statistics that can dominate primary schools. An alternative way of reducing pedagogical or curricular discontinuity is for staff working in different sectors to train or work together. Attempts at joint working have been reported from several Scandinavian countries but in each case the dominance of school culture and status has reduced the effectiveness of the initiatives.

What scope is there for a more learner-centred and differentiated approach in Primary 1 given the particular accountability pressures experienced by primary schools?

An alternative perspective on the relationship between early years education and the experiences that precede and follow it is to think of learning as a spiral process. Viewed in this way the relationship between the educational process from birth to three, during the early years and in primary school is one in which learning in one period is revisited and developed in the next. This model encourages curriculum design and pedagogy to respond to children's different patterns of progress from action and sensory orientated

exploration, through play and activity based learning to more formal linguistically and cognitively mediated instruction and exploration.

How are decisions made about when children should have particular educational experiences?

Chronological age is usually heavily involved in decision-making about when children should move into and out of early years settings, although the precise ages involved may vary between and within countries. Age often determines eligibility to begin participation in early years educational provision. The statutory age of compulsory education concludes the period, with the exception of those countries such as Wales where a deliberate decision has been taken to continue the early years learning experiences into primary school.

The mean age for starting school across 20 countries examined in one review was six years and world-wide the age at which states provide free, compulsory education is typically six or seven years. In Northern Ireland school starting age is four years and recently the Netherlands has moved to the same starting age as an early intervention measure. In Queensland, Australia the school starting age is to be raised to six and all five-year olds offered a full-time non-compulsory preparatory year before primary school begins. However, these policy variations cannot be endorsed by research findings. There is no definitive evidence about the progress of children who start school at different ages and international comparisons suggest that a later start appears not to disadvantage children. There is no compelling educational reason for beginning school at age five.

Readiness to begin the kind of educational experiences that children typically receive in early years settings seems to be almost uncontested and constrained only by national eligibility criteria. This absence of concerns about readiness for the early years curriculum may reflect the view that, given the focus on developmentally appropriate practice, practitioners can adjust the opportunities and support they offer to meet the needs of learners. There is an extensive literature in the USA about readiness for school where legislation stipulates that all children will start school ready to learn. It is a concept much less researched in Europe (where age is more likely to define access to school) but some issues raised by studies of readiness are pertinent here.

- Readiness testing has very limited predictive validity and test results are therefore of questionable use in decision-making about entry to school.
- Teachers, parents and children have different views of the skills or knowledge that are necessary for readiness.
- Schools need to be 'ready schools' able to support the diverse needs of age eligible children, rather than focusing on the traits of the child.
- Effective early years education can enhance school readiness.
- Readiness can be limited by risk factors such as poverty, parents' educational level, children's health and home environments that are unsafe or in disadvantaged neighbourhoods.
- There are no consistent results from studies examining the benefits of delaying school entry by one year for children considered 'not ready'.

Research suggests that there is considerable variation in children's developmental profiles as they enter and leave early years settings. A recent study in Scotland found what was described as 'enormous variations' in the assessment of children's cognitive development when they started school and little relationship between the amount of pre-school experience that children had received and their baseline assessment (a finding in sharp contrast to evidence from England). One response to this variation is to increase the flexibility of the school starting age and allow children to remain in an early education

What model of learning is implicit in our thinking about transition? Do we see it as a step in a continuing spiral or as a series of discrete phases each with their own pedagogy, curriculum and learning outcomes?

How can schools become 'ready schools' that are able to meet the diverse learning and social needs of children who are old enough to begin primary education?

Can developmentally appropriate practice compensate for using chronological age to decide when children should begin primary school?

setting for another year. An alternative is for children to move to primary school in accordance with established age patterns but to be grouped with others with similar starting points to experience a highly differentiated curriculum and pedagogy (in the first year at least) that allows for learning opportunities to match children's needs.

Conclusion

Our review of the international evidence suggests that:

- There is international recognition for early years as a distinct phase of education for children from about three to six years of age.
- Particular features of and expectations for early education will vary with cultural and socio-political conditions in society.
- There is widespread support for early years education as an intervention that can make a difference in the lives of disadvantaged children.
- There is evidence to suggest that early years education makes a difference to the cognitive and social/behavioural development of children and to some aspects of academic attainment and social behaviour in the first years of school.

There is no evidence to suggest that one curriculum is superior but there is widespread support for some features of early years education as crucial for children's learning:

- A holistic view of learning and the learner
- active or experiential learning
- respect for children's ability to be self-motivating and directing
- valuing responsive interactions between children and adults as crucial for learning.

Transition between any two phases of education poses challenges:

- Studies of transition suggest that there is a need to focus on matching provision with the needs of young learners rather than relying on general organisational changes.
- Children would benefit from more attention being paid to the way in which they are introduced to early years educational settings and the state of their learning as they begin that phase.
- Continuing the early years pedagogical approach into primary school would allow new curriculum content to be introduced in ways that are both familiar and developmentally appropriate. This is likely to be particularly helpful for young learners for whom the responsive pedagogy typical of early years settings offers sensitive support for the challenges of primary education.
- There are likely to be considerable individual differences in cognitive and social development when children move to school but current ways of assessing 'readiness' are of limited validity and differentiating learning experiences within the new setting is more likely to be effective in facilitating learning.
- Age can be used as an eligibility criterion for the move to another institution but should not imply that the child is ready for curriculum changes or reduce the need to ensure developmentally appropriate educational provision.

Acknowledgement

Virginia Cano assisted in the review process by conducting electronic searches, compiling the data base of material consulted and commenting on some of the articles identified.

Further Reading

A list of references is appended to the full report which is available on the Education Department, Analytical Services Unit website www.scotland.gov.uk/insight

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Astron 210663 02/06

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ISSN 1478-6796 (Online)