Re-thinking the Early Childhood curriculum for the 21st century

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CARE was a collaborative project funded by European Union. It aimed to develop an evidence-based and culture-sensitive European framework of developmental goals, quality assessment, curriculum approaches, and policy measures for improving the quality and effectiveness of early childhood education and care (ECEC)

http://ecec-care.org/
EU Project CARE       What should be the aims of ECEC?

Views were sought in 11 countries via:

• Focus groups with teachers and other staff
• Focus groups with parents, plus on-line survey
• Survey of senior researchers in 11 European countries
  – What is your country’s curriculum?
  – What is your preferred pedagogy?
  – What are your philosophical roots?
  – Age ranges
  – Qualifications of staff
  – Training and professional development

CARE identified a common European heritage: Theoretical models and pedagogical principles

Montessori
- Holistic, child-centred view
- Respect for the unique child
- Learning as an active process involving play, exploration, and creating
- Learning shaped by context and community
- Key role of the environment, social interactions, and relationships
- Importance of safety, security, pleasure and joy

Steiner

Froebel

Piaget

Vygotsky

Bronfenbrenner

Bowlby

Malaguzzi
'In CARE a strong socio-emotional orientation was identified in all countries... referring to children’s confidence, social participation, sense of identity, and sense of belonging, often *in combination* with a weaker emphasis on learning-related skills’ (Sylva et al., 2015).

However, the last decade has witnessed a more integrated view that acknowledges children's (academic) competencies but also emphasizes processes and skill development related to self-regulation, problem-solving, creativity and collaboration ... In all countries, educators valued the goals of children’s autonomy and independence, their sense of belonging and interdependence, but also learning processes - not ‘just’ learning outcomes. ‘
An emerging consensus on the aims of ECEC

Learning in all areas is about

Developing a positive self-concept, and engagement in social relations
- confidence,
- collaboration,
- communication,
- emotional self-regulation

Learning processes that include self-regulation and executive skills
- critical thinking and reasoning, problem solving, organisation and planning, decision making, enthusiasm for learning, curiosity, imagination, creativity, perseverance, self-management, adaptability, concentration
- Cognitive self-regulation

Acquiring knowledge about a subject and specific skills
- Content that is rich and helps children to develop knowledge of the world as well as higher order thinking skills
- Specific skills, including emerging academic skills
Structure of the English curriculum 0-5+ years
Seven domains of development, and three pedagogical processes to nurture them

Effective pedagogy/learning involves:

- Playing and exploring
- Active learning/problem solving
- Creating and thinking critically
Components of self regulation

**Cognitive**
- Persists with difficult tasks
- Chooses activities on their own
- Does not need much help with tasks
- Persists with tasks until completed
- Waits their turn in activities
- Likes to work things out for self

**Emotional**
- Is calm and easy going
- Gets over being upset quickly
- Waits their turn in activities
- Usually obeys instructions or requests
- Argues with adults (reversed)
- Often loses temper, has tantrums (reversed)
- Shows wide mood swings (reversed)

**Behavioural**
- Fidgets or squirms a lot (reversed)
- Waits their turn in activities
- Gets over excited (reversed)
-Usually obeys instructions or requests
- Argues with adults (reversed)
-Restless, does not keep still for long (reversed)
-Cooperates with requests
-Is impulsive, acts without thinking (reversed)

Items taken from a teacher/parent completed Questionnaire from E Melhuish and S Howard ‘Early Years Toolkit’ (2016)
‘Effective Pre-School, Primary and Secondary Education’ (EPPSE)
1997 – 2016

A longitudinal study funded by the UK Dept for Education, Sutton Trust

Principal Investigators: Kathy Sylva¹, Edward Melhuish¹, Pam Sammons¹, Iram Siraj¹ and Brenda Taggart²

¹University of Oxford; ²Institute of Education, University of London
The (Early) Education System in England

- ECEC is free from age 3-5+ years, and from age 2 for disadvantaged children
- All Pre-school providers follow the ‘Early Years Foundation Stage’ national curriculum
- Development of all children is assessed at age 5 via the ‘Foundation Stage Profile’ (observation by teacher)
- Final year of the Foundation Stage is compulsory and all children attend ‘reception class’ in primary school
- Children are formally assessed at age 7 & 11 (national tests & teacher assessment) and by national tests at age 16/18
Effective Preschool, Primary and Secondary Education (EPPSE) design
6 Local Regions, 141 preschools, 3,000 children

3+ years

- 25 nursery classes in schools
  - 590 children
- 34 playgroups (voluntary)
  - 610 children
- 31 private day nurseries
  - 520 children
- 20 nursery schools
  - 520 children
- 24 local authority day care nurseries
  - 430 children
- 7 children’s (integrated) centres
  - 190 children
- Home
  - 310 children

Age 5 - 7
Key Stage 1
600 schools

Age 7 - 11
Key Stage 2
800 schools

Age 11 - 16
Key Stage 3
800 schools
Sources of data

➢ Child assessments over time

➢ Child/Family background information, e.g., SES, birth weight, home learning activities

➢ Interviews with all parents, teachers

➢ Questionnaires for children

➢ Case studies of children who ‘succeeded against the odds’ (Siraj)

➢ Observation quality rating scales of pedagogy
Many influences on child outcomes at age 11

Family Factors

Child Factors

Home-Learning-Environment

Cognitive outcomes:
- English & maths tests

Social/Behavioural outcomes: extended Goodman
- Self Regulation
  - Likes to work things out for self
- Pro-social
  - Considerate of others feelings
- Hyperactivity
  - Restless, cannot stay still for long
- Anti-social
  - Fights with other children

Pre-School

Primary School
Two Early Childhood Environment Quality Observation Rating Scales

**ECERS-R**
- Based on observation
- 7 sub-scales:
  - Space and furnishings
  - Personal care routines
  - Language reasoning
  - Activities
  - Interaction
  - Programme structure
  - Parents and staff

- *Harms, Clifford & Cryer (1998)*

**ECERS-E**
- Based on observation
- 4 sub-scales:
  - Literacy
  - Mathematics
  - Science and environment
  - Diversity

- *Sylva, Siraj-Blatchford & Taggart (2010)*
### Example ECERS-R item: Greeting/departing (Personal Care Routines)

<table>
<thead>
<tr>
<th>Inadequate`</th>
<th>Minimal</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1.1 Greeting of children is often neglected</td>
<td>3.1 Most children greeted warmly (Ex. staff seem pleased to see children, smile, use pleasant tone of voice)</td>
<td>5.1 Each child is greeted individually (Ex. staff say “hello” and use child’s name; use child’s primary language spoken at home to say “hello”)</td>
<td>7.1 When they arrive, children are helped to become involved in activities, if needed</td>
</tr>
<tr>
<td>1.2 Departure is not well organised</td>
<td>3.2 Departure well organised (Ex. children’s things reading to go)</td>
<td>5.2 Pleasant departure (Ex. children not rushed, hugs and good-byes for everyone)</td>
<td>7.2 Children busily involved until departure (Ex. no long waiting without activity; allowed to come to comfortable stopping point in play)</td>
</tr>
<tr>
<td>1.3 Parents not allowed to bring children into the classroom</td>
<td>3.3 Parents allowed to bring children into the classroom</td>
<td>5.3 Parents greeted warmly by staff</td>
<td>7.3 Staff use greeting and departure as information sharing time with parents</td>
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</tbody>
</table>
### Example ECERS-E item: Book and literacy areas (Literacy)

<table>
<thead>
<tr>
<th>Inadequate</th>
<th>Minimal</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>1.1 Books are unattractive and/or not of a suitable age level</td>
<td>3.1 Some books of different kinds are available</td>
<td>5.1 A variety of types of book are available</td>
<td>7.1 Book area is comfortable (rug and cushions or comfortable seating) and filled with a wide range of books at many levels of complexity</td>
</tr>
<tr>
<td>3.2 An easily accessible area of the room is set aside for books</td>
<td>5.2 Book area used independently by children (outside group reading times)</td>
<td>7.2 Adults encourage children to use books and direct them to the book area</td>
<td></td>
</tr>
<tr>
<td>3.3 Some reading takes place in the book area</td>
<td></td>
<td>7.3 Books are included in learning areas outside of the book corner</td>
<td></td>
</tr>
<tr>
<td>Inadequate</td>
<td>Minimal</td>
<td>Good</td>
<td>Excellent</td>
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<tr>
<td>2</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>1.1 No preparation of food/drink is undertaken in front of children</strong></td>
<td><strong>3.1 Food preparation is undertaken by staff in front of the children</strong></td>
<td><strong>5.1 Food preparation / cooking activities are provided regularly</strong></td>
<td><strong>7.1 A variety of cooking activities in which all children may take part are provided regularly</strong></td>
</tr>
<tr>
<td></td>
<td><strong>3.2 Some children can choose to participate in food preparation</strong></td>
<td><strong>5.2 Most of the children have the opportunity to participate in food preparation</strong></td>
<td><strong>7.2 The ingredients are attractive and the end result is edible and appreciated</strong></td>
</tr>
<tr>
<td></td>
<td><strong>3.3 Some food-related discussion takes place where appropriate</strong></td>
<td><strong>5.3 The staff lead discussion about the food involved and use appropriate language</strong></td>
<td><strong>7.3 The staff lead and encourage discussion on the process of food preparation and/or question children about it</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>5.4 Children are encouraged to use more than one sense (feel, smell, taste) to explore raw ingredients</strong></td>
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</tbody>
</table>
Duration and pedagogical quality of preschool make a difference
Value added fixed effects models

Pre-literacy Outcome: phonological awareness plus letter knowledge
Developmental advantage (in months of development) on pre-literacy at school entry: scores at age 5
The impact of pre-school pedagogical quality (ECERS-E) on English and Mathematics tests: controlled for pre-test at baseline and family and child co-variates

Net Effect of Quality (ECERS-E) of Pre-School on English and Mathematics at Age 11

<table>
<thead>
<tr>
<th>Quality Level</th>
<th>English</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Quality</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>Medium Quality</td>
<td>0.22</td>
<td>0.26</td>
</tr>
<tr>
<td>High Quality</td>
<td>0.29</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Reference Group: Home Children
There is no effect of the ECERS-R on English or Mathematics at age 11. (However there was an effect on social behavioural outcomes)
The impact of pre-school quality (ECERS-R and ECERS-E) on self-regulation at age 11 after controlling for co-variates

<table>
<thead>
<tr>
<th>Pre-school Quality (ECERS-R)</th>
<th>Pre-school Quality (ECERS-E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect Sizes: Self-regulation</td>
<td>Effect Sizes: Pro-social Behaviour</td>
</tr>
<tr>
<td>Low quality</td>
<td>Home children - Reference group</td>
</tr>
<tr>
<td>0.06</td>
<td>0.00</td>
</tr>
</tbody>
</table>
The impact of pre-school quality (ECERS-R and ECERS-E) on anti-social behaviour at age 11
Pathways to attainment in literacy and numeracy

Early Years Home Learning
3+

Pre-school quality and Effectiveness
3-5 years

Self-regulation
at age 5

Literacy
ages 7, 11, 14

Numeracy
ages 7, 11, 14
• Correlations and not causal experiments
• Sample not ‘purely’ representative (i.e., oversampled high quality maintained provision in England)
• This talk did not report on qualitative case studies of pedagogy in effective settings (Siraj-Blatchford et al., 2002)
Towards a common European curriculum?

• European curricula are the consequence of different cultural, political and historical traditions
• They also have a strong values base, which leads to variation across Europe
• Emerging consensus on adding ‘soft skills’ like self regulation to ECE curriculum (CARE 2015, 2016)
• The English EPPE study shows that ‘quality’ varies even within a centralised curriculum and quality drives children’s outcomes.
• Perhaps there will be more agreement amongst countries on the nature of ‘quality’ and how to achieve it.


