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**Conference or Workshop Item**

**Title:** Young children's explorations: young children's research?

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Young Children’s Explorations: Young children’s research?

BECERA
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This presentation addresses:
Snapshot of findings from the Young Children as Researchers (YCaR) enquiry:

Children aged 4-8 engaging in one research behaviour: ‘Exploration’

Part of: ‘An enquiry conceptualising naturalistic ways in which young children aged 4-8 years are researchers, may develop as researchers and may be considered researchers’

1. Context
2. Questions
3. Approach
4. Findings
1. Context

- ECEC teacher for 20 years
- Career change to ECEC lecturer
- Hegemony in educational research excludes children (Hargreaves, 1996; Redmond, 2008)
- In England, children 0-8 years often disregarded as social actors in matters affecting them (UN, 1989; UNCRoC, 2008; DfEE and QCA, 1999)
- Paucity of research placing children 0-8 as researchers – increasing exceptions (*inter alia*, Clark and Moss, 2001; Frost, 2007)
Can children aged 0-8 years be researchers?
Gathering evidence from different disciplines for ‘capabilities’ in children aged 0-8 years...

Psychology

• Potentially significant cognitive capabilities of babies and toddlers (Goswami and Bryant, 2007)

• Children 18 months+ are cognitively equipped for aspects of critical thinking (Piaget, 1970; Meltzoff, 1995; 2007; Wellman and Gelman, 1992; Gopnik and Meltzoff, 1998)

• At 18 months children are capable of understanding inference, intentionality, another’s goals (Meltzoff, 1977; 1995; 2007): Theory of mind.
Sociology

- Children as young as 12 months can be competent social actors (Markström and Halldén, 2009)

- Children’s rights agenda suggests possibilities for children being researchers (United Nations (UN), 1989; Laming, 2003; Children’s Rights Alliance for England (CRAE), 2009)

- Emergence of participatory approaches (Alderson, 1995; Clark, Kjorholt and Moss, 2005; O’Kane, 2008)

- Emancipatory ‘new paradigm’ discourses (Corsaro, 2005; Cannella, 2002; Dahlberg, Moss and Pence, 2007)
Economics

- **Capabilities**: ‘...the alternative functionings the person can achieve and from which he or she can choose one collection’ (Sen, 1993:31)
Further context....

ECEC

ECEC focuses on children’s first eight years (United Nations Convention on the Rights of the Child (UNCRC), 2005). ECEC has long advocated ‘exploration’ as an important medium for young children’s development (Rousseau, 1762; Pestalozzi, 1810; Froebel, 1826; Montessori, 1914; Isaacs, 1929; Piaget, 1952; 1970)
Education in England

- Persistent themes of adult control, discipline and preparation for economic productivity (Board of Education, Deasey, 1978)
- Government-commissioned reports advocated exploration for young children’s learning (Hadow, 1933; CACE, 1967; DES, 1990)
- Persistent themes of adult control, discipline and preparation for economic productivity (Galton et al., 1980; 1999; Alexander, 2009)
- Current research focus on interactionism (Siraj-Blatchford et al., 2002; Wood, 2007; Rose, 2008; Alexander, 2009; Sylva et al., 2010)
- Persistent themes of adult control, discipline and preparation for economic productivity (DfE, 2010)
2. Some questions…

- Do young children aged 4-8 years in three early childhood education and care (ECEC) settings explore?
- If so, what are their explorations and what effects and affects them?
- Do young children’s explorations count as epistemology?
What is exploration?

• Neonate activity: sensory, sentient explorations (Gopnik, Meltzoff and Kuhl, 1999; Roach, 2003)

• Indicated for young children’s successful global development (Broadhead, 2001; Garner and Bergen, 2006; Meadows, 2006; Arnold, 2009)

• Epistemic play (Hutt et al., 1989)

• Research element in qualitative enquiry (Whyte, 1949; Charmaz, 2006; Silverman, 2006; Hammersley and Atkinson, 2007)
3. Approach

• Synthesis of focus on epistemology, (Audi, 1998), ‘new’ sociology (Jenks, 2005) and ‘folk’ psychology (Davies and Stone, 1995)

• Located in field of Early Childhood Education and Care (ECEC), nested in educational research

• A critical ethnographic study... (Carspeckeen, 1996)

• ...within a constructivist grounded approach (Glaser and Strauss, 1967; Charmaz, 2006)

• Concerned with children’s naturalistic behaviours
What is research?

• Various definitions (i.a. OECD, 2002; HEFCE, 2005; Stenhouse, 1975; AHRC, 2009)

• No universal definition

• For – and within - this study, a framework of research behaviours (RBF) was established empirically

• Initial sampling: 14 Professional EYs and Educational Researchers (PEYERs)

• Interview conversations and focus group
### Theoretical sampling (Charmaz, 2006): ECEC settings…case studies

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Class of 7-8 year-old boys and girls (n=30) and their practitioners (n=3)</td>
</tr>
<tr>
<td>B</td>
<td>4-5-year-old boys and girls (n=60) in an Early Years Foundation Stage unit and their practitioners (n=7)</td>
</tr>
<tr>
<td>C</td>
<td>4-5-year-old boys and girls (n=60) in an Early Years Foundation Stage unit and their practitioners (n=5)</td>
</tr>
</tbody>
</table>
Accessing Data in Settings (and Homes)

1) Personal CRB check and UoN ethics committee approval

2) Gain access to ECEC setting

3) Secure informed consent from SL and staff

4) Work as Volunteer TA

(Ryle, 1968; Fine and Sandstrom, 1988; CRB, 2010)

5) Collect multiple layers of data in the setting WHILE identifying children for closer focus (n=17)

6) Home visits 1 and 2 – multiple layers of data collected by families

7) Share data, review and analyse then develop next steps in study

8) Share outcomes
## Data collection - multi-modal approach
*(Clark and Moss, 2001)*

<table>
<thead>
<tr>
<th>Field Notes</th>
<th>Video filming of children’s naturalistic behaviour indoors</th>
<th>Photographs taken by researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents [e.g. planning, school prospectus)]</td>
<td>Observations of children’s naturalistic behaviour outdoors</td>
<td>Formal interview conversations</td>
</tr>
<tr>
<td>Observations of children’s naturalistic behaviour indoors</td>
<td>Photographs taken by children</td>
<td>Informal interview conversations</td>
</tr>
</tbody>
</table>
# Data analysis for each research behaviour (Charmaz, 2006)

<table>
<thead>
<tr>
<th></th>
<th>1. Transcribe data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1\textsuperscript{st} analysis: Initially code each child observation transcription. Link the PERs research behaviours to each unit of meaning</td>
</tr>
<tr>
<td>3</td>
<td>2\textsuperscript{nd} analysis - Axial coding</td>
</tr>
<tr>
<td>4</td>
<td>Catalogue occurrences of the category and the axial codes to create an overview of all setting observations</td>
</tr>
<tr>
<td>5</td>
<td>‘Advanced memo’ - critical discussion focused on the category.</td>
</tr>
<tr>
<td>6</td>
<td>3\textsuperscript{rd} analysis draws together the category. Further axial coding with examples for each child</td>
</tr>
<tr>
<td>7</td>
<td>Critical discussion. Draw together the strands of the analysis for the category.</td>
</tr>
</tbody>
</table>
4. Findings
Do young children aged 4-8 years in three early childhood education and care (ECEC) settings explore?

- 14 of 17 children who were closely observed presented with exploratory behaviours.
- 1227 separate incidences of children aged 4-8 years exploring across 18 days in three settings.
- Children’s explorations featured in 85 observations.
If children aged 4-8 years explore, what are their explorations? (e.g.)

• Gemma (g4, SB) explored the video camera and its properties for some hours before planning and setting up scenes to film
• Pedro (b4, SC) examined rocks through his binoculars before piling them onto the tricycle
• Martin (b5, SC) rolled tyres before piling two together, placing himself inside the tyre tower and adding three more.
While the teacher was talking...

- Gemma (g4, SB) explored the zip of another child’s dress
- Harry (b4, SB) explored what would happen to his shirt if he twisted the front of it as far as he could and he later followed an ant’s progress with his finger.
- Querida (g4, SC) explored a hair by pulling one out of her own head and examining it closely.
What effected children’s explorations?

Free availability of varied…

• Materials (e.g. seeds, soil, tent, bricks, sugar cubes)
• Objects (e.g. tyres, wooden blocks, magnets)
• Relationships
• Scientific processes
• Features of their own bodies

…that could be applied in different ways
• Opportunities to initiate and freely pursue explorations (The frequency of children exploring in the teacher-directed setting was 43% of the frequency of children exploring in the ‘open framework’ settings)

• ‘Open framework’ setting organisation (Siraj-Blatchford et al., 2002)

• Opportunities to develop and pursue their interests to a ‘deep level’ (Laevers, 2000)

• Boredom
• Practitioners’ affirmation
• Peer interactions
• Stimuli presented by peers and adults
• Opportunities to repeat explorations
• Experiences and knowledge previously constructed, in and out of the setting
• Time and opportunity for ‘deep-level’ exploration (Laevers, 2000)
What affected children’s explorations (negatively)?

• Teacher-directed setting
• Detailed planning and strong direction by practitioners
• Practitioners’ concern for children’s safety
• Time limitations, particularly whole school timetabling
• Lack of direct access to resources
Do young children’s explorations count as epistemology?

While they explored, children were observed…

- Planning (Charmaz, 2006)
- Data gathering (Hammersley and Atkinson, 2007)
- Interpreting (Silverman, 2006)

Are these research behaviours?
Furthermore…

• Some children contributed to analysing video footage of children exploring.

• These children offered further interpretations of what they saw in the video footage (Silverman, 2006).

• Children identified many incidences of children exploring.

Are these research behaviours?
If they are research behaviours...

...It may be argued that young children’s explorations observed in their settings count as epistemology.
Endnote…

• The full study is an attempt to reconceptualise children as researchers (Piaget, 1970),
• It does so in the context of new discourses and evidence from ECEC, education, sociology, psychology and economics
• It provides new empirical evidence from contemporary ECEC settings and young children’s homes.
• The study is ongoing…
• Broader, deeper analysis of the data is planned, conducted through the lenses of the other research behaviours identified by PEYERs.