Eager and Able to Learn Programme for Two-Three Year Olds

Baseline Survey: Children and Settings

Evaluation of the EAL Programme

Implications for Practice

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Overview of the Masterclass

• 1.45-2.30  Introduction to the research, demonstration of Bayley items, research findings from baseline survey
• 2.30-3.00  Group discussion
• 3.00-3.30  Coffee
• 3.30-4.00  Research findings from EAL programme
• 4.00-4.35  Group discussion
• Plenary
Baseline Survey: Aims

• To gain a snapshot of the developmental status of a large sample of 2-3 year old children at a single point in time – as they entered early years settings.

• To observe the quality of the provision in a sample of the early years settings.

• To explore knowledge, attitudes and self-reported behaviours of practitioners and parents, related to the developmental needs of 2-3 year olds.

• To observe the quality of the provision in a sample of the early years settings.
Research Instruments

• **Children’s Developmental Status**
  – Developmental Domains
    • Cognitive
    • Language
    • Motor
    • Social-Emotional
    • Adaptive Behaviour
  – Through play-based tasks and practitioner ratings

• **Quality of Settings**
    • Overall Quality
    • Different dimensions of quality
  – Through structured observations

• **Practitioners and Parents**
  – Specially designed survey questionnaires
  – Self-completed
Baseline Survey: Sample

- Children
  - 655 children, aged between 2 years and 3 years, 1 month, mean age was 2 years 7 months
  - 341 boys and 314 girls
  - Wide range of socio-economic backgrounds, but NOT a representative Northern Ireland sample

- Parents/Guardians
  - 501 completed questionnaires

- Practitioners
  - 230 completed questionnaires from 90 settings

- Settings
  - 40 settings were observed using ECERS-R (March 2009)
What is Bayley III?

• Assesses a child’s development from birth to 42 months
• Standardised assessment, children’s scores compared with NORMS – what is expected for same-aged children (1 month intervals), US norms, with UK supplementary norms
• The ‘average’ score is set at 10
• Consists of
  – play-based tasks which must be administered by a trained observer
  – Rating scales completed by someone who knows the child well, normally the parent (we used practitioners)
What domains of children’s development are assessed?

Through play-based tasks observed by trained field workers:

- cognition
- receptive language
- expressive language
- fine motor development
- gross motor development
What domains of children’s development are assessed?

Through Rating Scales completed by practitioners in the settings (behaviour frequency – all the time, most of the time, half of the time, some of the time, none of the time, can’t tell)

Social Emotional Scale
Adaptive Behaviour Questionnaire (5 subscales)
  Communication
  Functional Pre-academics (emergent literacy)
  Self-direction
  Leisure/play
  Social skills
Short demonstration of items from the Bayley domains of child development
Baseline Survey: Findings - Children

Figure 1. Mean Standard Scores for each Developmental Domain
Baseline Survey: Findings - Children

Mean Standard Scores for Boys and Girls for each Developmental Domain

Bayley Developmental Domains

Cognitive, Receptive Lang, Expressive Lang, Fine Motor, Gross Motor, Socio-Emot, Comm, Functional Acad, Self-Direction, Leisure/Play, Social Skills

Mean Standard Score

Boys
Girls
Baseline Survey: Findings - Children

Mean Standard Scores for Children with High Affluent vs High Deprived Backgrounds
(Top vs Bottom Quartiles of the Distribution)

Bayley Developmental Domains

- Cognitive
- Receptive Lang
- Expressive Lang
- Fine Motor
- Gross Motor
- Socio-Emot
- Comm
- Functional Acad
- Self-Direction
- Leisure/Play
- Social Skills

High Affluent
High Deprived
What is ECERS-R?

- Structured observation by trained fieldworkers – one visit
- 7 sub-scales (43 items) each dedicated to a different aspect of early childhood practice
  - Space and furnishings – well-being, physical and motor development
  - Personal care routines – health and safety
  - Language and reasoning – stimulates language and communication
  - Learning activities – cognitive stimulation
  - Interactions – high quality social interaction between adult-child and child-child
  - Programme structure
  - Relations with parents and between staff
Scoring ECERS-R

• Each domain is scored from 1-7

  1  2  3  4  5  6  7
  Minimal  Adequate  Good  Excellent

• Two methods of scoring

Quality Bands
  minimal (rating <3);
  adequate (rating 3<5), and
  good plus (rating 5+)

Mean Overall Rating and mean rating per sub-scale
Findings: Percentage of 40 Settings in ECERS-R Quality Bands

- **Minimal<3**: 42.5%
- **Adequate 3<5**: 57.5%
- **Good 5+**: 0%

**Percentage**

**ECERS Quality Bands**

Overall
Baseline Survey: Findings - Quality of Settings

Figure 2. ECERS-R Mean Quality Ratings: 40 Settings

<table>
<thead>
<tr>
<th></th>
<th>Mean Ratings</th>
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<tbody>
<tr>
<td>Overall Average</td>
<td>3.29</td>
</tr>
<tr>
<td>Space and Furnishings</td>
<td>3.31</td>
</tr>
<tr>
<td>Personal Care Routines</td>
<td>3.02</td>
</tr>
<tr>
<td>Language Reasoning</td>
<td>2.94</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>2.3</td>
</tr>
<tr>
<td>Interactions</td>
<td>4.49</td>
</tr>
<tr>
<td>Program Structure</td>
<td>3.58</td>
</tr>
<tr>
<td>Parents and Staff</td>
<td>4.23</td>
</tr>
</tbody>
</table>

ECERS-R Total and Sub-Scales
Baseline Survey: Conclusions

• The baseline sample of children was most developmentally advanced in language and least advanced in some adaptive behaviours associated with social skills and playfulness. Gross motor development was surprising low but in line with other UK samples.

• The variability observed between same-aged children (for whatever reason) will have consequences for practitioners.

• The average quality ratings for settings is adequate with very few settings showing good-excellent ratings.

• There is room to improve communication and sharing of activities between parents and early year practitioners.
Baseline Survey: Findings – Parents and Practitioners

• Positive and developmentally sensitive portraits of interactions with 2-3 years were reported
• Sedentary play activities were reported more frequently than active activities
• No evidence that play was ‘in peril’
• Some contrasting images of ‘good play’ held by both parents and practitioners
• Good alignment between parents’ and practitioners’ views on communication and working relationships
Group Discussion
Session 1
The EAL Programme: Key Components

- Emphasis on physical movement as a means to enhance development across a range of domains;
- Emphasis on the physical design of the setting environments;
- Emphasis on the quality of relationships – practitioner/child, parent/child, and parents/practitioners;
  - In the setting – a series of developmental movement and play activities
  - A home-based element, including workshops with parents and home visits
  - Settings supported by SEYS, initial training and cluster training
  - Service design manual for settings, home learning package for parents
Evaluation of the EAL Programme: Aims

• The purpose of the trial evaluation was to identify the outcomes that participating in the EAL programme had for children’s development, for the quality of the settings, and for parents’ and practitioners’ views and attitudes, compared to those who had not participated.

• The purpose of the fidelity study was to measure the extent to which the programme was implemented and to explore the processes of implementation and stakeholders’ experiences.
Method: Design of the Trial

Design of the Trial – over two years Oct 2008-June 2010

Same 28 settings participated with different cohorts of children

<table>
<thead>
<tr>
<th>Pre-tests Oct08</th>
<th>Continue with normal activities - Control</th>
<th>Post-tests June09</th>
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</thead>
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<tr>
<td>Pre-tests Oct09</td>
<td>Deliver EAL programme for children - Intervention</td>
<td>Post-tests June10</td>
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The question: “have the EAL children made more gains than those in control group?”
Method: Sample

• Children
  – 454 children aged between 2 years and 3 years 1 month at pre-testing, were assessed using Bayley III at pre- and post-test points
  – 197 children were in the control group, 257 in the intervention group

• Settings
  – 28 settings (from the original 40 baseline settings) were observed twice, using ECERS-R, in March 2009 and March 2010

• Parents and Practitioners
  – 390 parents and 180 practitioners completed pre- and post-test survey questionnaires
Evaluation of the EAL Programme: Findings for Children

Key findings (with effect sizes)

- In general, children social and emotional development was positively affected with some negative effects on cognitive development.
  - Positive effects were found for social-emotional development (+.30), with smaller positive effects on communication skills (+.17), social skills (+.17), and self-direction (+.13)
  - Negative effects were found for emergent literacy (-.29) and cognitive development (-.29), with a smaller negative effect on fine motor development (-.17)
  - No substantial effect sizes were found in the other domains
  - See next graph
Evaluation of the EAL Programme: Findings for Children

Effects of EAL on Children's Development: Effect Size

Bayley Developmental Domains

- Cognitive
- Receptive Lang
- Expressive Lang
- Fine Motor
- Gross Motor
- Socio-Emot
- Comm
- Functional Acad
- Self-Direction
- Leisure/Play
- Social Skills
Evaluation of the EAL Programme: Findings for Settings

Effect of EAL Intervention on Percentage of Settings in ECERS-R Quality Bands

<table>
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<tr>
<th>ECERS Quality Bands</th>
<th>Percentage Before EAL</th>
<th>Percentage After EAL</th>
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<tbody>
<tr>
<td>Minimal&lt;3</td>
<td>35.7</td>
<td>21.4</td>
</tr>
<tr>
<td>Adequate 3&lt;5</td>
<td>64.3</td>
<td>71.4</td>
</tr>
<tr>
<td>Good 5+</td>
<td>0</td>
<td>7.2</td>
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Evaluation of the EAL Programme: Findings for Settings

Figure 3. ECERS-R Mean Quality Ratings for 28 Settings: Control vs EAL
Evaluation of the EAL Programme: Findings for Parents and Practitioners

- Key findings (with effect sizes)
  - Positive effects were found for both parents’ and practitioners’ beliefs, knowledge and behaviours with effect sizes ranging from +.19 to +.68.
  - In particular, practitioners reported increased sensitivity to the needs of 2-3 year olds, being less likely to report ‘harsh and controlling’ interactional styles (+.29 to +.57).
  - Parents reported playing with their children in different ways and a sharper recognition about the role of play and physical activity in learning (+.33 to +.42).
  - Both practitioners and parents reported increased satisfaction about communication and about sharing materials and activities.
Evaluation of the EAL Programme: Conclusions

- The impact of the EAL programmes produced surprising outcomes for children, with some positive effects and some negative effects.

- The positive effects on social-emotional development are consistent with the positive boost reported on interactions and the quality of the settings, together with practitioners’ and parents’ reports of improved relationships.

- Nevertheless, in the light of the negative findings on some domains of children’s development, the content of the EAL programme needs to be re-evaluated.
Group Discussion
Session 2
Recommendations

The report makes 13 recommendations including:

• The need for increased sensitivity to the variability of 2-3 year old children and for settings to find ways to respond appropriately;

• The need for regulatory frameworks, and settings, to adopt more rigorous indicators of quality;

• The need to re-evaluate the content of the EAL programme so that the positive outcomes for children, settings, parents and practitioners are maintained and the negative impacts are minimised or turned around;

• For future practice, policy and research to focus specifically on the needs of 2-3 year olds.
Further Details

• Full versions of the reports on the Baseline Study, the EAL Cross-Over Design Evaluation and the Fidelity Implementation Study can be downloaded, respectively, from:
  
  – [www.qub.ac.uk/cee](http://www.qub.ac.uk/cee)
  
  – [www.ncb.org.uk/resources](http://www.ncb.org.uk/resources)

• Details of the above links can also be found in the Executive Summary
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