Nebraska Early Childhood Education.........
A Programmatic Evaluation

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Associate Professor
UNMC’s Munroe-Meyer Institute
Evaluation vs. Research

- Use many of the same methodologies

- Differ in purpose
  - Provide data decision making and continuous program
  - Monitoring progress towards outcomes

- Based on program logic model

- Client-focused
What are the Nebraska Early Childhood Education (ECE) Programs?

- Programs operated by NE school districts or Educational Service Units (ESUs)
- Supported across multiple funding sources
- Support children ages birth – 5 across home or center-based settings
Provide high quality early childhood education program experiences

Assist children to reach their full potential and increase the likelihood of their later success in school
Integrated Funding Supports ECE Programs

Total $69,851,198

State $16,307,531

Federal $31,679,637

Local/Other $21,864,030
Children Serve: Total-11,704

Age

- Infants & Toddlers: 86%
- Preschoolers: 14%

Children with IEPS/IFSPs

- With IFSPs or IEPS: 70%
- Peers: 30%
Children Served: Total-11,704

English Language Learners (ELL) - 87%
- 13%

Eligible for Free/Reduced Lunch - 52%
- 48%

Children Served: Total-11,704
Children Served: Total - 11,704

Minorities

- Minorities: 57%
- Peers: 43%
Child, family, and program outcomes measurement system

Accountability system

Improved Practices and Outcomes for Children/Families
Longitudinal Data System: Purpose

• Link data
  ○ Across the early childhood period
  ○ Across time
  ○ Across data sets

• Answer new questions
  ○ Classroom quality and child outcomes
  ○ Relationship with early childhood and academic outcomes
## Measurement of Classroom Program Quality

<table>
<thead>
<tr>
<th>ECERS</th>
<th>ELLCO</th>
</tr>
</thead>
</table>
| • Quality of the General Environment  
  o 100% of Infant and 94% of preschool classrooms were of **high quality**  
  o Classrooms had most difficulty meeting the state standard on the **Personal Care Routines** subscale | • Quality of the Literacy Environment  
  o 90% of preschool classrooms **met state standard** |
Measurement of Program Family Engagement Sessions:

HoVRS

- Family educators were effective in their practices:
  - High level of family engagement
    - score was 4.65
  - High quality instructional practices
    - score was 4.7*

*based on a 5 point scale
Evaluation of Three Child Outcomes: Online Observational Assessment

**Outcome A**: Children have positive **social skills** including positive social relationships

**Outcome B**: Children acquire and use **knowledge** and skills including language/communication

**Outcome C**: Children take **appropriate action** to meet their **needs** (e.g., self-help and initiative)
Analyzing Child Outcomes

NDE Reporting:

- % that met a state established performance goal
- % that made greater than expected gains

Data Collection

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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Fall → Spring
### Outcome A: Positive Social Relationships

<table>
<thead>
<tr>
<th>What does “Positive Social Relationships&quot; mean?</th>
<th>What does research say?</th>
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<tbody>
<tr>
<td>• Attachment</td>
<td>• Children who have opportunities to <strong>develop socially and emotionally</strong> are more likely to succeed in school (Raver, 2002)</td>
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<td>• Expressing emotions</td>
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</tr>
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<td>• Learning rules</td>
<td></td>
</tr>
<tr>
<td>• Social Interactions</td>
<td></td>
</tr>
<tr>
<td>• Relationships</td>
<td></td>
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What does “Positive Social Relationships" mean?

- Attachment
- Expressing emotions
- Learning rules
- Social Interactions
- Relationships

What does research say?

- Children who have opportunities to **develop socially and emotionally** are more likely to succeed in school (Raver, 2002)
Social Relationships:
Percent of Children Making Substantial Gains

Infant and Toddler Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Percentage of Children</th>
</tr>
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<tbody>
<tr>
<td>All Programs</td>
<td>81.3</td>
</tr>
<tr>
<td>Part C</td>
<td>68.1</td>
</tr>
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<td>Sixpence</td>
<td>95.2</td>
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Preschool Programs

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<tr>
<td>ECE Grant</td>
<td>85.1</td>
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</table>

ECE Grant n=1478
Part B n=898
Part C n=64
Sixpence n=81
All Programs n=145
All Programs n=4353
Social Relationships: Percent of the Children Meeting the NDE Performance Goal

**Infant and Toddler Programs**

- **Part C n=64**
  - Fall: 32.8%
  - Spring: 51.6%

- **Sixpence n=81**
  - Fall: 74.1%
  - Spring: 75.9%

- **All Programs n=145**
  - Fall: 55.9%
  - Spring: 95.1%

**Preschool Programs**

- **Part B n=898**
  - Fall: 15.1%
  - Spring: 5.6%

- **ECE FRL n=713**
  - Fall: 62.7%
  - Spring: 66.5%

- **ECE ELL n=269**
  - Fall: 20.3%

- **ECE Grant n=1478**
  - Fall: 39.3%
  - Spring: 21.1%

- **All Children n=4353**
  - Fall: 62.3%

Legend:
- Fall
- Spring
<table>
<thead>
<tr>
<th>What does “Knowledge and Skills” mean?</th>
<th>What does research say?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Thinking</td>
<td>• Experience in these conceptual areas is key for children from poverty who will benefit from <strong>content-rich instruction</strong> (Neuman, 2006)</td>
</tr>
<tr>
<td>• Reasoning</td>
<td></td>
</tr>
<tr>
<td>• Remembering</td>
<td></td>
</tr>
<tr>
<td>• Problem Solving</td>
<td></td>
</tr>
<tr>
<td>• Symbols &amp; language</td>
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Knowledge and Skills: Percent of Children Making Substantial Gains

**Infant and Toddler Programs**

- All Programs $n=145$: 78.7%
- Part C $n=64$: 70.6%
- Sixpence $n=81$: 95.8%

**Preschool Programs**

- All Programs $n=4353$: 83.2%
- Part B $n=898$: 62.2%
- ECE Grant $n=1478$: 87.3%
Knowledge and Skills: Percent of Children meeting the NDE performance Goal

Infant and Toddler Programs

<table>
<thead>
<tr>
<th></th>
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<th>All Programs n=145</th>
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<tbody>
<tr>
<td>Fall</td>
<td>28.1</td>
<td>70.4</td>
<td>51.6</td>
</tr>
<tr>
<td>Spring</td>
<td>56.3</td>
<td>75.9</td>
<td></td>
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Preschool Programs

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<tbody>
<tr>
<td>Fall</td>
<td>14.4</td>
<td>31.0</td>
<td>13.4</td>
<td>15.7</td>
<td>15.9</td>
</tr>
<tr>
<td>Spring</td>
<td>57.9</td>
<td>56.1</td>
<td>2.2</td>
<td>63.3</td>
<td>55.8</td>
</tr>
</tbody>
</table>
### Outcome C: Children Take Appropriate Action to Meet their Needs

<table>
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<tr>
<th>What does “Take appropriate action to meet needs“ mean?</th>
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<tbody>
<tr>
<td>• Takes care of basic needs</td>
<td>• A child’s physical well-being can affect the ability to <strong>actively engage in learning opportunities</strong> (Pica, 2006)</td>
</tr>
<tr>
<td>• Gets from place to place</td>
<td></td>
</tr>
<tr>
<td>• Uses tools</td>
<td></td>
</tr>
<tr>
<td>• Contributes to own health &amp; safety</td>
<td></td>
</tr>
<tr>
<td>• Completes self-help skills</td>
<td></td>
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Taking Actions to Meet Needs: Percent of Children Making Substantial Gains

### Infant and Toddler Programs

- **All Programs** (n=145) - 71.8%
- **Part C** (n=64) - 65.5%
- **Sixpence** (n=81) - 78.5%

### Preschool Programs

- **All Programs** (n=4353) - 83.3%
- **Part B** (n=898) - 67.8%
- **ECE Grant** (n=1478) - 84.7%
Taking Actions to Meet their Needs: Percent of Children Meeting the NDE Performance Goal

Infant and Toddler Programs

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<td>Part C n=64</td>
<td>7.8</td>
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Note: The data for ECE Programs includes ECE FRL (Economic Hardship), ECE ELL (English Language Learners), and ECE Grant.
Analyzing Child Outcomes

OSEP Reporting:

• % that demonstrated skills comparable to same aged peers (based on widely held age expectations)

• % that made greater than expected gains

Data Reporting:

Entry  Exit
<table>
<thead>
<tr>
<th>Made Substantial Gains</th>
<th>Met Age Expectations</th>
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<tr>
<td>• Met the State Targets</td>
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<tr>
<td>▪ Social - 74.0%</td>
<td></td>
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<tr>
<td>▪ Knowledge – 63.0%</td>
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<td>▪ Independence – 74.2%</td>
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<td>▪ Independence – 72.9%</td>
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## OSEP Findings: Part B 619 (3 to 5) (n=1649)

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<td>• Independence - 80.4%</td>
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Evaluation of Long Term Child Outcomes
Percent of Children Who Met or Exceeded Standards in Reading, Math Writing:

- Majority of children in ECEG classrooms met or exceeded the standards in reading, math, and writing
  - ECEG children (FRL) out-performed their peers in 6th and 11th grades in reading
  - ECEG children (All) out-performed their peers in 8th and 11th grades in math
  - ECEG children (FRL) out-performed their peers in 4th grade
Met all targets in all outcomes: Knows rights, Communicates needs, & support child’s development [Survey]
Does participation in Sixpence improve the home environment?

Home Inventory (Short Form) Mean Standard Score (n=92)

Families who scored in the low average area or below in the Fall, achieved significant positive gains by Spring (n=92, p=.000, paired t-test).
Does participation in Sixpence improve the home environment?

Kips Mean Score based on a 5 point Likert Scale (n=21)

Families achieved significant positive gains by Spring (n=21, p=.001, paired t-test.)
ECE Programs make a difference...

Participation in high quality experiences for young children resulted in:

• immediate short-term benefits that help to narrow the gap in skills

Participation in high quality family engagement programs resulted in:

• Parents in knowing their rights and advocating for their child
• Improved parent-child interaction to support their child’s development
Relevance to Practice and Policy Contexts

- Program evaluation is an important aspect of a service delivery model as it provides time information
  - Programmatic decision making
  - Continuous program improvement

- Important to develop integrated longitudinal data systems
  - Expand data available to answer practice and policy issues
Questions? Comments?

Acknowledgements:

NDE Early Childhood Team
Kathleen Feller, Sixpence
Sixpence Board