Center on Everyday Child Language Learning

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Presentation made at the Third International Society on Early Intervention Conference,
Purpose of the Center

Implement and evaluate an approach to early childhood communication intervention that uses everyday activities as sources of interest-based learning opportunities to promote the communication and language development of young children with development disabilities and delays.
Center for Everyday Child Language Learning Model

- Caregiver-Mediated Instructional Practices
- Child Interests
- Communication Rich Everyday Activities
- Increased Learning Opportunities
Research Foundations for the CECLL Practices

- Findings from a meta-analysis of adult learning method studies and results from a series of field-based studies were used to identify the key characteristics of effective professional development (implementation) practices.

- Findings from meta-analyses of (a) interest-based child learning, (b) everyday activities that are the contexts for communication and language learning, (c) methods for increasing child participation in everyday activities, and (d) the key characteristics of responsive and facilitative caregiver interactional behavior were used to identify the core practices of the CECLL model.
Relationship Between the Center’s Implementation and Intervention Practices

<table>
<thead>
<tr>
<th>Implementation Practices</th>
<th>Intervention Practices</th>
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<tbody>
<tr>
<td>Evidence-based participatory adult learning strategy (PALS) used to promote practitioners’ knowledge and skills using the CECLL practices</td>
<td>Practitioners promote parents’ adoption and use of evidence-based everyday communication and language learning practices with the parents’ children</td>
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Capacity-Building Parent Involvement

Parents’ adoption and use of the CECLL practices is accomplished using a capacity-building approach to parent involvement that supports and strengthens parents’ knowledge, skills, and sense of confidence and competence in terms of their abilities to use interest-based everyday child learning opportunities to promote early communication and language skills.
Measuring Center Effectiveness

• CECLL is using an approach to evaluation that employs variations in implementation fidelity as an independent variable where variations in implementation are related to variations in child outcomes.
• The relationship between variations in intervention fidelity and changes in child communication and language development is assessed using linear growth curve analysis where the differences in growth curve slopes for high vs. low fidelity are evaluated by effect sizes.
Center Measures

**Implementation Fidelity**
- Investigator-completed scale on practitioner use of the CECLL practices
- Practitioner-completed scale on parent use of the CECLL practices
- Parent-completed scale on the characteristics of caregiver-mediated everyday child learning activities

**Child Outcomes**
- Early Communication Development Scale
- Communication and Symbolic Behavior Scale
- Mullen Scale of Early Learning
- Preschool Language Scale
- IGDI - Early Communication Indicator Subscale
Relationship Between Implementation Fidelity and Child Communication Development

**Purpose**
Evaluate the relationship between variations in the fidelity of parents’ use of the CECLL practices and changes in the children’s early communication development

**Participants**
Sixty-three infants and toddlers 8 to 40 months of age and their parents

**Outcome Measures**
Fidelity: A weekly parent-completed scale of child participation in and the characteristics of everyday learning activities
Child Outcome: Early Communication Development Scale
The scale used to assess intervention fidelity captured two aspects of the use of the CECLL practices:

- Quantity of child participation in everyday activities (number of settings, number of activities within settings, frequency of participation)
- Quality of child participation in everyday activities (development-enhancing characteristics of the child learning experiences and opportunities)
Early Communication Development Scale

The Early Communication Development Scale includes 54 items measuring nonverbal and verbal communication behavior from birth to 30+ months of age. The order of the scale items was determined by the Winsteps Rash-model data analysis program. At each administration, a child’s level of communication is ascertained using logit score. The logit scores were used as the outcome measures in the analyses reported in this presentation. (A constant was added to the logit scores to eliminate negative scores.)
Influences of Fidelity on Child Communication Development

Cohen’s $d = 0.62$ for differences in the slopes

Low Fidelity

High Fidelity
Lessons Learned (So Far)

• Promoting parents’ understanding of the value and importance of everyday activities as sources of child learning opportunities is a necessary condition for the CECLL model and practices to be adapted and used.

• Explicit attention to the evidence-based characteristics of development-enhancing everyday learning is important for maximizing child benefits.

• Even in the presence of overall high fidelity small variations in infidelity are associated with differences in child outcomes.
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www.cecll.org

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