

# Early Head Start University Partnerships: Building the Evidence Base for Infant/Toddler Center-based Programs

## 2015 Grantees

### University of Miami

**Principal Investigator:** Daryl Greenfield

**Co-Principal Investigator(s):** Veronica Fernandez

**Project Title:** An Inquiry Based Approach: Supporting Teachers and Families to Improve Early Child Development for Infants and Toddlers

**Project Abstract:** The overall goal of this project is to implement an inquiry-based approach to improve parent and teacher practices, which will support and improve developmental outcomes for infants and toddlers. The intervention will have two phases. Phase 1 will focus on supporting Responsive Caregiving practices (for both parents and teachers) to promote the social and emotional development of infants and toddlers. Phase 2 will focus on the Facilitation of Discovery and Exploration (again, for both parents and teachers), to promote cognitive as well as language and early literacy outcomes of infants and toddlers. A randomized control trial (RCT) will be implemented to evaluate the efficacy of the Phase 1 and Phase 2 components. The intervention approach is based on Practice-Based Coaching (P-BS), the coaching model already in use in Head Start/Early Head Start. We will enhance the current coaching model (P-BS) as well as current teaching and learning practices, by integrating an intentional focus on inquiry.

**Sample:** Participants will be drawn from all three partner agencies in Miami Dade County with Early Head Start-Child Care (EHS-CC) programs. All of these programs are serving children and families in high-poverty areas throughout Miami-Dade County. In total, the three programs will be serving 1,310 infants and toddlers across approximately 164 classrooms. Although the concentration of ethnic backgrounds varies depending on the zip code, the high-poverty areas in Miami-Dade County consist of mostly Latinos and Blacks. Teachers in all three EHS-CC programs are expected to have earned or will be enrolled in a program for the Infant-Toddlers CDA credential. Study participants will consist of the following five groups: EHS-CC program coaches, center directors, teachers, families, and children.

### **Proposed Measures:**

Teacher-child interactions

- Classroom Assessment Scoring System, Toddler Version

- Classroom Assessment Scoring System, Infant Version

#### Parent-child interactions

- Parent-Child Interaction Rating Scales for the Two-Bag Assessment

#### Home-School Connection

- The Family and Provider/Teacher Relationship Quality Questionnaire: Short Form (B)

#### Children's social-emotional development

- Brief-Infant-Toddler Social and Emotional Assessment
- The Devereux Early Childhood Assessments for Infant
- The Devereux Early Childhood Assessments for Toddlers
- The Ages and Stages Questionnaire-Social Emotional

#### Children's cognitive development

- Ages and Stages Questionnaire
- Teaching Strategies GOLD
- Preschool Language Scale- Fourth Edition

#### Fidelity

- Social-Emotional Supportive Practices
  - The Teaching Pyramid Infant Toddler Observation Scale
- Coaching with teachers and families
  - Video recording of the coaching cycles
  - Contact log of conversations/web-mediated interactions with teachers
  - Survey completed at the end of each year by teachers and families
- HS Performance Standards
  - The Implementation and Evaluation Workgroup will co-construct a means to quantify the extent to which each program has implemented the standards
- Qualitative Approach
  - In-depth interviews with coaches, center directors, teacher, and parents
- Readiness to Change Measures
  - Adapted from Wanless, Patton, Rimm-Kaufman, and Deutsh to measure factors that have been associated with implementation fidelity.

## University of Nebraska-Lincoln

**Principal Investigator:** Lisa Knoche

**Co-Principal Investigator(s):** Susan Sheridan, Helen Raikes

**Project Title:** Getting Ready 0-3 (GR03): Supporting Development of Infants/Toddlers through an Integrated Parent-Teacher Relationship-based Approach

**Project Abstract:** This project will implement and evaluate the Getting Ready 0-3 (GR03) intervention in collaboration with rural Early Head Start (EHS) partner agencies. GR03 is an inventive, evidence-based intervention that strengthens the relationships children have with adults as well as partnerships between parents and other providers responsible for the care of their children. In GR03 teachers and parents identify and build on a child's strengths; establish developmental targets; and co-create meaningful, consistent home-center plans to support developmentally appropriate targets. GR03 is implemented via carefully constructed professional development for teachers, whereby they learn intentional relationship-building and parent-professional partnership strategies, including a sequenced collaboration framework that supports continuity across settings and use of child-focused practices. Furthermore, GR03 is:

- a. readily integrated within EHS programmatic structures;
- b. grounded within agency, community, and family strengths; and
- c. individualized for centers, staff, families, and children with varying levels of need.

The project will be conducted in three phases. Phase 1 will serve as a pilot to develop training and implementation protocols and assess fit within EHS partner agencies. Phase 2 will consist of a randomized cluster trial with repeated measures design to examine the impacts of GR03 on parent- and teacher-child relationships, child-focused adult parenting and teaching practices, and parent-teacher partnerships relative to EHS families in the business as usual group to understand how to support most effectively the language and social-emotional development of EHS center-based children. Phase 3 will focus on sustainability.

**Sample:** The Phase 1 GR03 pilot will involve two EHS teachers and four families. In Phase 2, the total projected sample includes 60 EHS center-based and Early Head Start-Child Care (EHS-CC) Partnership teachers and 240 EHS children and their parents or primary caregivers. Teachers will be randomly assigned to condition (n=30 per condition). All English- and Spanish-speaking families with potential for receiving EHS program services for a minimum of 18 months will be eligible to participate in the study. Eligible families will be recruited when children are six weeks to 18 months of age and will participate for up to two years during their enrollment in EHS center-based programming.

### **Proposed Measures:**

- Child-Focused Teaching Practices

- Quality of Caregiver-Child Interactions for Infants and Toddlers
- Infant/Toddler Environmental Rating Scale
- Child-Focused Parenting Practices
  - Parental Style Questionnaire
  - Home Observation for Measurement of the Environment Inventory for Infants-Toddlers
- Parent/Teacher Partnership
  - Parent-Caregiver Relationship Scale
  - Family and Provider/Teacher Relationship Quality Parent Measure
  - Family and Provider/Teacher Relationship Quality Provider/Teacher Measure
- Teacher/Child Relationship
  - Caregiver Interaction Scale
  - Student-Teacher Relationship Scale
- Parent/Child Relationship (responsiveness, support for autonomy)
  - Parent-Child Interaction Rating Scales for the Two-Bag Assessment
- Child Development
  - Social Emotional
    - Brief Infant Toddler Social Emotional Assessment
    - Ages and Stages Questionnaires
  - Language
    - Preschool Language Scale-5
    - McArthur-Bates Communicative Development Inventory
    - Ages and Stages Questionnaires
- Factors Contributing to Effectiveness (Moderators)
  - Family
    - Demographic Form (parental/partner education, occupation, family income, physical health, housing, assistance, marital status and other demographic risk factors)
    - Center for Epidemiology Study of Depression
    - Parenting Stress Index
    - Teti's Maternal Efficacy Scale
  - Teacher
    - Demographic Form (education, experience, income)
  - Agency and Community
    - Case Study, including focus groups, interviews, and document review
- Implementation (Dosage, Fidelity, Quality, Participant Responsiveness)
  - Family Contact and Child Attendance Records
  - Home Visit Rating Scales
    - Home visitor facilitations of parent-child interactions
    - Home visitor non-intrusiveness and collaboration
    - Parent-child interaction during home visit
    - Parent engagement during home visit
    - Child engagement during home visit
  - Coaching Completion Records
  - Getting Ready Fidelity Checklists

## University of Texas, Health Science Center of Houston

**Principal Investigator:** Ursula Johnson

**Co-Principal Investigator(s):** Bethanie Van Horne

**Project Title:** An Integrative Approach to Improve Child Outcomes through Research-based Parent-Teacher Interventions

**Project Abstract:** The purpose of the project is to adapt two research-based parent and teacher interventions, Play and Learning Strategies (PALS) and Beginning Education: Early Childcare at Home (BEECH), to examine the benefit to low income infants' and toddlers' language, cognitive, and social-emotional development as well as self-regulation skills. PALS and BEECH include web-based parent and teacher training courses with remote coaching and in-person meetings that support the adults' developing a set of core behaviors that comprise a responsive interactive style including responses that are contingent to children's needs and interests with rich language input. Both interventions incorporate video exemplars of the target behaviors with caregivers from diverse backgrounds, uploaded videotaped interactions of parents or teachers interacting with children, and caregivers critiquing videotapes of their interactions with their coach remotely. We will adapt the interventions for the EHS center-based setting and for a hybrid delivery format with collaboration from Early Head Start (EHS) staff and families. Classrooms will be randomized to receive PALS and BEECH vs "business as usual" practices. We will assess change in target vs. control teachers' responsive and instructional behaviors and evaluate intervention effects on children's skills. Results of the study will show whether raising the quality of parent and teacher responsive behaviors across both the home and EHS center-based classroom settings result in an added benefit to children's learning and development, compared to no intervention in either setting.

**Sample:** The study will be conducted in five Early Head Start agencies serving infants and toddlers in Houston and San Antonio, TX. The schools primarily serve African American and Hispanic American children in full day programs. Fifty-five classrooms will be randomized to receive PALS and BEECH vs "business as usual" practices. Six parent-child dyads will be randomly selected from each classroom for a total of 330 children.

### **Proposed Measures:**

- Observed teacher behaviors
  - The Quality of Caregiver-Child Interactions for Infant and Toddlers (Q-CCIIT) Scale
- Observed parent behaviors
  - The following parent behaviors will be coded from a 15-minute "free play" and 5-minute "shared reading" activities between parent-child. The Caregiver-Child Responsive Coding System has been previously developed and validated for videotaped parent-child interactions.

- Support of child's signals and interests
  - Contingent responsiveness
  - Rich language input
  - Warm sensitivity
- Moderator variables:
  - Center for Epidemiologic Studies Depression Scale
  - Parental Modernity Scale
  - Parenting Stress Index
- Child outcomes:
  - Child language and cognitive skills
    - Preschool Language Scale – Fifth Edition
    - Early Communication Indicator
    - MacArthur-Bates Communicative Development Inventories – Infant Short Form and Toddler Short Form
    - Bayley Scales of Development –III Cognitive Scale
    - Caregiver-Child Responsive Coding System scale for 'language use' during parent-child interaction
  - Child social-emotional behaviors
    - Brief Infant Toddler Social Emotional Assessment
    - Bayley Behavioral Ratings Scale
    - Caregiver-Child Responsive Coding System for 'cooperation' and 'social engagement' during parent-child interaction
  - Child self-regulation
    - Children 24 months or older - Gift/Waiting for the Bow” paradigm
    - Children 18 months or older - “Walk the Line” task
    - Children 22 months or older - “Tower” task

## Wayne State University

**Principal Investigator:** Ann Stacks

**Co-Principal Investigator(s):** Claire Vallotton (Michigan State University), Maria Muzik (University of Michigan)

**Project Title:** Recognizing, Reflecting, and Responding to Infant/Toddler Cues: An Integrated Parent-Teacher Intervention to Support Social-Emotional Development through Caregiver Mindfulness and Sensitivity

**Project Abstract:** Faculty from the Michigan Infant-Toddler Research Exchange are developing and testing an integrated parent-teacher intervention to support infant/toddler social emotional (SE) development based on an established and tested model, the Mom Power (MP) intervention. MP was developed for high-risk mothers and targets caregiver sensitivity by building capacity for reflection and empathy to children's emotional needs. This attachment-based group intervention helps parents understand children's attachment needs using video and activities designed to promote parental reflective functioning. It also increases caregiver coping through mindfulness practices. Evidence suggests that MP is effective at improving both caregiving sensitivity and reflective functioning. This 5-year project will be completed in four main study phases:

1. refinement and Implementation evaluation of a teacher intervention component based on MP model;
2. refinement and Implementation evaluation of an integrated teacher-parent modification of MP;
3. evaluation of effectiveness of the integrated teacher-parent intervention to change caregiver outcomes, caregiver-child interactions, and child outcomes, including tests of moderators and mediators;
4. Implementation evaluation to assess sustainability and scalability of the integrated intervention within the Early Head Start (EHS) context.

**Sample:** The study will be conducted at 4 EHS programs that serve families in 8 Michigan counties. Phase 1 will include piloting the teacher intervention component with 20 teachers. Phase 2 will include the integrated intervention with 36 teachers (4 intervention groups) and 60 parents (6 intervention groups). Phase 3 will include 100 teachers and 120 parents randomized into intervention and control groups (50 teachers in each group; 60 families in each group).

### **Proposed Measures:**

- Teacher Outcomes
  - Caregiver-child interactions
    - The Quality of Caregiver-Child Interactions for Infant and Toddlers (Q-CCIIT) Scale
  - Teacher reflective functioning
    - Teacher Reflective Functioning Interview

- Mindfulness
  - Observe, Listen, Wonder and Respond Scale
  - Interpersonal Mindfulness in Teaching
- Beliefs and well-being
  - Childcare Worker Job Stress Survey
  - The Teacher Care Patterns Questionnaire
  - Center for Epidemiologic Studies Depression Scale
- Parenting Outcomes
  - Parent-child interactions
    - Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO)
  - Parent reflective functioning
    - Parent Development Interview – Revised Short Form
  - Mindfulness
    - Interpersonal Mindfulness in Parenting
  - Beliefs and well-being
    - Center for Epidemiologic Studies Depression Scale
    - Parent Stress Index – Short Form
- Parent-Teacher Partnership
  - Family and Provider/Teacher Relationship Quality (parents and teachers)
  - Parent-Teacher Relationships Scale (parents and teachers)
- Child Social-Emotional Development
  - Brief Infant Toddler Social-Emotional Assessment (parent and teacher)
- Moderators
  - Mindfulness disposition
    - Philadelphia Mindfulness Scale (parents and teachers)
  - Adverse childhood Experiences (parents and teachers)
    - ACES Scale
  - Attachment representations (parents and teachers)
    - Attachment Script Assessment
  - Child Temperament
    - Infant Behavior Questionnaire
- Implementation Evaluation
  - Dosage
    - Attendance Records
  - Fidelity
    - Videotapes of group sessions
  - Acceptability, feasibility, appropriateness, facilitators and barriers
    - Satisfaction surveys

- Implementation interviews
- Self-care skills survey