Enhancing Early Childhood Teacher Knowledge About Effective Teacher–Child Interactions:
Findings From the National Center for Research in Early Childhood Education (NCRECE)

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And many, many others at UVA, UNC and project sites!
Effective Teacher Child Interactions
What we Know

• Teacher-child interactions are a key feature of effective early childhood programs
• These interactions can be described and measured in three broad domains
  – Emotional Support
  – Classroom Organization
  – Instructional Support – General and Content Specific
• Teachers need more support to improve the effectiveness of their interactions
• Intensive, targeted PD can improve interactions
What We Don’t Know

• How do teachers develop the skills to interact effectively with children?
• What knowledge and belief systems are important to the development of interactional skills?
• When PD is effective, how does it work?
NCRECE

• National Center for Research on Early Childhood Education
• IES-funded center focused on effective teaching in early childhood programs
• Large randomized control trial of two forms of professional development targeting effective teaching:
  – 14 week course
  – MyTeachingPartner Consultation
Conceptual Model

Professional Development → Teacher Beliefs, Knowledge and Skills → Classroom Practice → Child Outcomes

NCRECE Course & MTP Consultation

Effective Teacher-Child Interactions
- Beliefs
- Knowledge
- Skills in Detection

Children’s Literacy and Language Development
- Beliefs
- Knowledge

Effective Interactions that support Literacy and Language Skills
- Emotional Support
- Classroom Organization
- Instructional Supports
- Literacy and Language Supports

Children’s Literacy and Language Development
Overview

• Development of Measures
• Preliminary Results – Course Phase
• A Model for Effective, Intentional Teaching
Teacher Beliefs

• Teacher Beliefs About Intentional Teaching
  – 11 items; teachers rate agreement with statements about intentional teaching (Strongly Disagree to Strongly Agree)
  – Sample Items: “Preschool children are too young to benefit from explicit instruction in early literacy;” “Preschoolers learn the most from centers when teachers let them explore on their own.”
  – Alpha = .67
  – Revised version used in later stage of study
Teacher Knowledge

• Teacher Knowledge of Effective Interactions
  – 15 multiple choice items assessing knowledge about effective interactions and content knowledge in literacy and language
  – Sample Item: The teacher has difficulty getting her students to do what she wants at circle time. Her children tend to be highly active, don’t consistently listen to the lesson, and frequently interrupt. Which of the following would most effectively help her improve the children's behavior?
    a. ignore all misbehavior to prevent reinforcing the wrong thing
    b. restate classroom expectations for circle time before beginning the activity
    c. redirect children when they move, make comments, or fidget
    d. post clear and positively stated classroom rules
Teacher Skill Detection

- Video Assessment of Interactions and Learning (VAIL)
  - Watch 2 short videos
  - Sample question: Name up to 5 strategies the teacher is using to engage the students in the lesson and hold their attention. For each strategy list a specific behavioral example of the strategy from the clip.
  - Responses coded for accuracy in alignment with CLASS and the breadth (number of different elements of a CLASS dimension which were correctly identified)
# Associations – control group only (n=130)

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<th>Detection of Effective Interactions - Breadth</th>
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Associations with Observed Practice
control group only (n=108)

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Can a college course change skills, beliefs, knowledge, and interactions?

• Results from Course phase of the PD study
• Over 300 teachers in 9 sites across the country randomized into course or control condition
• Range of settings, education levels
• Course:
  – 14 weeks, 3 hours a week
  – Units focus on enhancing teacher knowledge about effective interactions and ability to “see” these interactions in videos
• Intent to treat analyses
Teacher Beliefs about Intentional Teaching

- Teachers in the course were more likely to endorse intentional teaching practices
- Effect Size = .40
Knowledge about Effective Interactions

- Teachers in the course condition scored higher on multiple choice items about effective interactions.
- Effect Size = .77
Teacher Skills in Detecting Effective Interactions

- Teachers in the course demonstrated better skills in detecting effective interactions in video
- Effect Size = .57
Emotional Support

- Positive Climate: ES = .35
- Negative Climate (reversed): ES = .18
- Teacher Sensitivity: ES = .29
- Regard for Student Perspectives: ES = .48**
Classroom Organization

- Behavior Management: ES = .14
- Productivity: ES = .21
- Instructional Learning Formats: ES = .40*
Instructional Support

Class Rating

- Concept Development: ES = .63***
- Quality of Feedback: ES = .51***
- Language Modeling: ES = .56***
- Literacy Focus: ES = .16
Do changes in belief and knowledge explain changes in practice?

- Limited evidence that changes in beliefs and knowledge explain changes in practice. Trends suggesting some evidence that VAIL scores mediate improvements in Instructional Support
  - Direct effects on practice
  - Measurement issues
Intentional Teaching – A Dynamic Systems View

- **Creating/Planning** – creating opportunities for learning; learning objectives; curricula; materials; assessment
- **Seeing** – focused attention; cue detection; observing children; observing self
- **Knowing** – knowledge of a repertoire of intentional, targeted responses; knowledge of individual child needs
- **Doing** – skills to engage/foster development through interaction
Future Directions

• Creating and testing better measures of each part of the system
• Understanding factors that influence each part of the system – including teacher beliefs, experiences, and professional development experiences
• Unpacking types of coursework that lead to sustained changes in belief, knowledge, AND practice