Promoting School Readiness in Child Care Centers: The REDI-BKC Project

A collaboration of the Child Study Center, Prevention Research Center, and Cooperative Extension System

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Seminar Goals

1. Provide an overview of the REDI program and discuss impact on child outcomes
2. Describe the BKC distance-delivered professional development program
3. Explain the REDI-BKC project goals, intervention approach, and research design
4. Discuss key issues in intervention design and implementation planning
About the REDI Program

- Initiated in 2003 to build upon and enrich “usual practice” preschool programming
- Integrated research-based practices to promote social-emotional & language/literacy readiness
- Emphasized curriculum implementation and teaching quality (positive management, emotion coaching, language use, problem-solving dialogue)
- PD model involved 4 days of workshop training and weekly classroom visits and coach meetings
REDI Logic Model

Prekindergarten Intervention
- Teaching Strategies
- Positive Management
- High Quality Language Use
- Emotion Coaching
- Problem-Solving Dialogue

INTERVENTION
Curriculum, Teacher Support, Take Home Materials
- Child Competencies
  - Language & Emergent Literacy
  - Social-Emotional Skills

School Adaptation
- School Success
  - Social competence
  - Behavior problems
  - Learning engagement
  - Peer and teacher relationships
  - Parent involvement

School Success
- Social competence
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Social-Emotional Skills:
The Preschool PATHS™ Curriculum
Domitrovich, Greenberg, Kusche & Cortes (2005)

- Friendship skills
- Emotion knowledge
- Self-control
- Social problem-solving
REDI Language & Emergent Literacy Components

• Daily dialogic (interactive) reading
  – Vocabulary prop box & target words
  – Scripted suggestions for active discussion
  – Interface with PATHS themes

• Sound games (3X/week)

• Alphabet Center
Teaching Strategies

Social-Emotional
- Positive Classroom Management
- Praise & Warm Involvement
- Emotion Coaching
- Induction Strategies
- Social Problem-Solving Dialogue

Language & Literacy
- Language Expansions
- Rich & Targeted Vocabulary
- Questions & Reflections (to extend narrative)
- Decontextualized Talk
Head Start REDI Evaluation Design

• 356 4-year-old children in 44 Head Start classrooms

• Classrooms stratified on location, demographics, length of day & randomized to intervention or “usual practice”

• Assessments at the beginning and end of the Head Start pre-kindergarten year
Implementation Fidelity / Quality

- Teachers completed:
  - 87% of dialogic reading lessons
  - 86% of sound games
  - 84% of alphabet center activities
  - 88% of PATHS lessons

- REDI trainers rated quality of implementation: 4.39 - 4.70 on 6-point scale (adequate to strong range)
Intervention Effects on Head Start Teaching Quality

<table>
<thead>
<tr>
<th>Teaching Quality</th>
<th>Effect</th>
<th>P-Value</th>
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</thead>
<tbody>
<tr>
<td>Positive Emotional Climate (TSRS)</td>
<td>.42</td>
<td>.05</td>
</tr>
<tr>
<td>Emotional Support (CLASS)</td>
<td>.49</td>
<td>.11</td>
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<tr>
<td>Positive Class Management (TSRS)</td>
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<td>Positive Discipline (TSRS)</td>
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<td>Instructional Support (CLASS)</td>
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<td>.08</td>
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Teacher Language Use

<table>
<thead>
<tr>
<th>Language Use</th>
<th>Effect</th>
<th>P-Value</th>
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<tbody>
<tr>
<td>Statements (CLEO)</td>
<td>.72</td>
<td>.001</td>
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<tr>
<td>Questions (CLEO)</td>
<td>.77</td>
<td>.001</td>
</tr>
<tr>
<td>Decontextualized Talk (CLEO)</td>
<td>.62</td>
<td>.001</td>
</tr>
<tr>
<td>Rich-sensitive Talk (CLEO)</td>
<td>.62</td>
<td>.004</td>
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</tbody>
</table>
Pre-K Child Outcomes: Small to Medium Cross-Domain Effects

- Aggression: ES = .28 teacher .19 obs.
- Emotion Recognition: ES = .23
- Problem Solving: ES aggress= -.21 ES comp = .35
- Emergent Literacy: ES = .16 - .39
- Vocabulary: ES = .15
- Learning Engagement: ES = .29 Obs.
Follow-Up Assessment:
Sustained REDI Intervention Effects as Children Transitioned to 208 Kindergarten Classrooms

<table>
<thead>
<tr>
<th>Competence Area</th>
<th>REDI</th>
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<tbody>
<tr>
<td>Competent Problem-Solving</td>
<td>0.40**</td>
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<tr>
<td>Aggression – Teacher rating</td>
<td>-0.26*</td>
</tr>
<tr>
<td>Aggression – Parent rating</td>
<td>-0.22*</td>
</tr>
<tr>
<td>Learning Behaviors</td>
<td>0.28*</td>
</tr>
<tr>
<td>Phonemic Decoding</td>
<td>0.25*</td>
</tr>
</tbody>
</table>
Cross-Domain Influences

- Change in Vocabulary During Head Start
  - Change in Emergent Literacy Skills During Head Start
    - Change in Emotion Understanding During Head Start
      - Change in Competent Social Problem Solving During Head Start
        - Change in Positive Social Behavior During Head Start
  - Change in Emotion Understanding During Head Start
    - Change in Competent Social Problem Solving During Head Start
      - Change in Positive Social Behavior During Head Start
  - Reading Achievement in Kindergarten
Motivation for BKC Partnership

- An effective program
- An expensive implementation platform and PD system that cannot go to scale
- NEEDED: A more effective strategy for broad diffusion and PD
Penn State Better Kid Care

- Provides evidence-informed professional development for early care and education and out-of-school time professionals to improve the quality of their care and educational practices.
Program Components

- Web-based *On Demand* self-directed learning
- Print-ready professional development resources
- Instructor resources
- Monthly e-newsletter
- Social media
Better Kid Care On Demand

- More than 170 *On Demand* modules
- Modules provide 1 or 2 hours of professional development
- Certificate of completion issued after assessment
- CEUs available
- Accepted for CDA formal education hours
- Approved for professional development credit in 33 states
- Users in all 50 states and 35 countries (n=65,000)
- 250,000 modules completed
Alignment with State Standards

Aligned with PA Core Knowledge Competencies:

– Health, Safety and Nutrition
– Child Growth and Development
– Curriculum and Learning Experiences
– Families, Schools and Community Collaborations and Partnerships
– Assessment
– Professionalism and Leadership
– Program Organization and Administration
State Approval on BKC Website

Better Kid Care in Your State

Are Better Kid Care online lessons approved or accepted for child care professional development in your state?

Anyone can use Better Kid Care's On Demand online lessons for professional development. Open the link to your state to see if Better Kid Care's On Demand lessons are approved to meet state-specific professional development requirements.

Vermont

All two-hour Better Kid Care online On Demand lessons are approved by the Vermont Northern Lights Career Development Center to meet child care professional development requirements in Vermont.

Go to the Northern Lights Career Development Center website http://northernlightscdc.org/ to see a list Better Kid Care online lessons which are approved for use in Vermont.
Aligned with State Competency Areas
Key Partnerships

- Department of Defense, Military Community and Family Policy, USDA/NIFA and the University of Nebraska Extension (CYTTAP)
- PA Office of Child Development and Early Learning Centers for Disease Control Obesity Prevention Branch
- University of Nebraska Extension: Noyce Foundation
- University of WA Institute for Early Learning and Brain Sciences
- PA Department of Health
- PA Department of Education
- PSU Clearinghouse for Military Family Readiness
- PSU Integrated Pest Management
- PSU Child Study Center
- PSU Eberly College of Science Outreach
Interactive Support for Learners

- Discussion forum facilitated by BKC staff
- 800 telephone number for user support during business hours
- Monitored e-mail for Better Kid Care
Better Kid Care Website
http://extension.psu.edu/youth/betterkidcare
BKC On Demand Modules

- Self-directed learning
- Use of videos by trainers (vodcasts)
- Hybrid-cohort of users take series of lessons and meet periodically for discussion
- Staff meetings
- Resource information
- shared with families
REDI-BKC Project Goals

• Create an accessible, affordable, sustainable system to diffuse REDI into preschool and child-care centers

• Use integrated evidence-based curriculum components (Preschool PATHS with Language-Literacy)

• Condense face-to-face training to 2 days

• Add professional development for teachers via BKC on-line learning

• Add professional development for director coaches via 1 day workshop and BKC on-line learning communities.
Figure 1. Logic model for the REDI-BKC intervention.

- **REDI Content & BKC Infrastructure Support**
  - Online modules
  - Discussion Forums
  - Virtual Learning Communities
  - For teachers & For center directors

- **REDI Curriculum**: Improved instructional materials, evidence-based language, literacy & social-emotional lessons

- **Evidence-based Teaching Strategies**: Positive management, emotion coaching, problem-solving dialogue, enriched language

- **Professional Development Support for Classroom Teachers**
  - Workshop training plus BKC extensions; Coaching from center directors

- **Professional Development Support for Center Directors**
  - Training in quality monitoring; coaching & supporting teachers

- **Improved Child School Readiness**

- **Improved Teaching Quality**
Step 1: Develop BKC modules on REDI content for teachers

- Use the BKC format with REDI content
- Link BKC modules with the printed classroom curriculum that provides weekly activity guides
- Decide what material to present in workshops vs. on-line
The REDI Program –
Promoting school readiness with
evidence-based programming

About the REDI Program

REDI stands for Research-based and Developmentally Informed. It is an early learning program for preschool children. To use the REDI Program, you will need to purchase the Preschool PATHS® curriculum. You will also need to download and print the REDI language and literacy components [give web-site link].

The Preschool PATHS® curriculum manual will provide you with lesson plans that include stories, games, and activities to help you support the development of children’s social-emotional skills. The supplemental REDI Program downloads will provide 33 weeks of additional lesson planning and learning games and activities designed to supplement Preschool PATHS® and strengthen children’s language skills and reading readiness.

Notes

REDI Sound Games

Developmentally appropriate learning

The REDI lesson stories, games, and activities introduce skills in a developmentally appropriate manner. The early lessons focus on easier skills that provide a foundation for the more challenging skills placed later in the year. Research has shown that following a sequenced set of skills, like in the REDI Program, promotes school readiness, boosting children’s social, behavioral, and academic success during the later school years.

Program contents

The REDI training is divided into four modules. At the end of each module, you will complete a series of assessment questions. You must complete each set of assessment questions to go on to the next module. At the end, you will take a final assessment to receive a certificate of completion. When you complete the final assessment, you can print your certificate certifying that you completed all eight hours of professional development. This professional development counts for eight PQAS hours.

Delivering the REDI Program requires the purchase of the Preschool PATHS® curriculum. Additional REDI curriculum components can be downloaded from the link below. The REDI reading readiness components use the books from the DR book list, below and this set of photographs is used in the REDI Sound Game (link below).

PATHS® curriculum

DR book list
Contents

REDI Module 1: Introducing the REDI Program (2 hours)
Overview of the REDI Program, Supporting Social-emotional Learning, Promoting Language Skills & Reading Readiness, Teaching the First REDI Lessons

REDI Module 2: Supporting Emotional Development (2 hours)
How Emotions Develop in Early Childhood, Presenting the Preschool PATHS® Feeling Lessons, Teaching About Feelings through Stories, Talking About Feelings in the Classroom

REDI Module 3: Teaching Self-Control (2 hours)
Developing Self-Control, Presenting the PATHS® Turtle Technique, Helping Children use "Turtle" Effectively, Discussing Why Things Happen

REDI Module 4: Creating a 5-Star Classroom
Nurturing a Positive Classroom Climate, Enriching Classroom Language Use, Motivating Children to do the Right Thing, Using Problem-Solving Dialogue

The REDI program is segmented into four modules.

(graphic representation of the table of contents)
Module #1 Introducing the REDI Program

Lesson overview

Welcome to the REDI Program! As you work through this module, you will learn about the different components of the REDI Program and how they work to help you build children’s school readiness.

Lesson information

This lesson will:

- Review current research on best practices for supporting child school readiness.
- Provide background on the development and design of the REDI Program.
- Let you hear from teachers about their experiences with REDI.
- Show examples of the REDI Program components.
- Demonstrate how to start the REDI lessons.

Lesson objectives

- Learn about the value of the REDI Program.
- Become familiar with the REDI Program components and schedule.
- Answer basic questions about the program schedule and set-up.
- Prepare you to teach the first REDI lessons.

Lesson topics

1) Overview of the REDI Program
2) Supporting Social-emotional Learning
3) Promoting Language Skills and Reading Readiness
4) Teaching the First REDI Lessons
Question 1

How comfortable do you feel about your current skills in the area of supporting a positive classroom?

- a. Not at all
- b. Slightly
- c. Not sure
- d. Pretty much
- e. Very much

Question 2

As you begin the REDI Program, how much do you feel you need to build upon your strengths in the area of supporting a positive classroom?

- a. Not at all
- b. Slightly
- c. Not sure
- d. Pretty much
- e. Very much
Reflection activity

Goal setting

Take a few minutes to write some notes about your personal goals as you start this new program.

Think about things like:

What skills would you like to strengthen the most?

What specific practices would you like to use more in your classroom?

What specific skills do you want to help children learn and build throughout the school year?

Setting goals for professional growth is important.
What does REDI provide for teachers?

To use the REDI Program, schools must purchase the Preschool PATHS® curriculum. Preschool PATHS® provides the foundation for REDI, with lesson plans that target child social-emotional development with stories, games and activities. REDI supplements each of these lessons with additional lesson plans and learning activities that are coordinated with Preschool PATHS®, but focus on promoting child language skills and reading readiness. These supplemental REDI materials include 33 weeks of interactive reading, sound games, and alphabet center activities that can be downloaded and printed [give web-site link]. The comprehensive program filled with fun learning games and activities provides support for well-balanced school readiness.

PATHS® curriculum
Which is not a benefit that emerged from the study evaluating REDI?

- Children scored higher on vocabulary growth, phonological awareness, and print concepts.
- Observers recorded higher levels of aggressive behavior in children.
- Observers recorded higher-quality language use in the classroom.
- Children showed higher levels of emotional understanding and social problem-solving skills.

Correct. Observers did not record higher levels of aggressive behavior in children. Observers recorded lower levels of aggressive behavior in children who had received the REDI Program.
Which is not a benefit that emerged from the study evaluating REDI?

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One of the benefits of REDI was that children scored higher on vocabulary growth, phonological awareness, and print concepts.
Step 2: Design BKC modules and workshops to support center directors as REDI coaches

- Consider the PD needs of child-care center directors who will provide teaching staff with REDI coaching and monitor implementation fidelity
- Adapt material from the PATHS and REDI coaching manuals
- Create BKC modules and virtual learning communities for child-care directors.
REDI-BKC Research Design

• Recruit 72 child-care centers (24 per year, forming three cohorts) serving disadvantaged communities

• Randomly assign to intervention vs. “usual practice” control

• Estimate 100 classrooms and 200 teachers (lead teachers and assistants/aides) will participate across the three cohorts.

• Recruit 5-7 pre-K children within these classrooms (total N = 600 children)

• Assess children and teaching quality pre- and post-intervention

• Monitor implementation quality; collect measures on satisfaction and cost

• Follow-up with teachers (for program sustainability) and children (for outcome sustainability) one year later
Key Issues in Intervention Design and Implementation Planning

Recruitment issues: Child-care centers are highly variable in terms of their organization and educational focus.

To what extent should we screen programs for “readiness” for this intervention?

What dimensions of readiness might be most essential to program success?

What do we lose in terms of representativeness of the sample?
Key Issues in Intervention Design and Implementation Planning

**Intervention design:** REDI is a complex, multi-component program. Head Start had an existing PD model to build on, planning time for teachers, and supervisory supports.

Child care centers have fewer resources, less PD and highly variable supervisory support.

How much should we simplify REDI to avoid over-burdening child-care centers?

How much will impact be reduced if REDI is simplified?
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Other Questions, Comments, and Suggestions