

# Building an RTI Research Agenda

- Where do we begin?
  - What do we already know?
  - What do we need to learn?
  - What research is needed to chart the path?

# Challenge: How do we Translate RTI into Early Childhood Programs that are not Universal?

- What we know?
  - RTI Risk levels (the triangle) have typically been estimated for school-level, grade-level student populations
  - Multi-tier systems of support in grades K-5/6 are designed for delivery to risk populations within schools and classrooms
- What we need to learn?
  - What are the analogous place-based population level concepts for Early Childhood (e.g., centers, programs, cities, regions)?
  - How do discontinuities in EC program services by risk, age, disability, funding, and geography influence the design of systematic RTI approaches for young children?

# Challenge: How do we Translate?

- What research is needed to chart the path?
  - Studies are needed demonstrating the application of RTI concepts and practices in alternative, place-based Early Childhood population/program units
  - Studies are needed on how discontinuities in EC program services (e.g., by risk, age, disability, and geography) affects successful design and implementation of RTI approaches
  - Studies are needed illustrating how scaling up of EC programs and services overcome challenges to RTI approaches
  - Studies are needed showing how EC RTI programs can be integrated in concept and practice with K-5/6 RTI school programs

# Challenge: Need for Evidence-based Practice -Tier 1

- What we know
  - The prevalence of evidence-based practice in early childhood is much less than desired
- What we need to learn?
  - How many children are at risk for poor outcomes in programs?
  - How is the prevalence of children at risk influenced by use of evidence-based practice?
  - What skills need to be taught to ensure future success?
  - What instructional/intervention methods are most effective?

# Challenge: Tier 1 Intervention

- What research is needed to chart the path?
  - Risk assessments of child populations (e.g., program and classroom levels) are needed
  - Studies of how the prevalence of risk in EC populations is reduced by use of evidence-based practice
  - Studies of the predictive validity of earlier skills - precursors that forecast future success or proficiency
  - Programmatic experimental studies that invent new instructional techniques, confirm impact on the skills of interest, and establish effectiveness at scale

# Response to Intervention in Early Childhood



- [Home](#)
- [About Us](#)
- [RTI](#)
- [Research](#)
- [Resources](#)
- [Contact Us](#)

- [Progress Monitoring](#)
- [Interventions](#)
- [Proposed Tier Prevention Model for Language and Early Literacy](#)

## T-1 Universal Instruction

- **Children served** -- All children
- **Intervention practices** -- Evidence-based universal curriculum for early literacy and language that meets specified criteria (e.g., Opening the World of Learning (OWL), Building Language for Literacy)
  - 180 day scope and sequence targeting the 4 essential curricular areas: oral language and vocabulary; phonological and phonemic awareness, print awareness and alphabet knowledge; comprehension
  - Daily large and small group instruction on early literacy and language
  - Literacy rich classroom environment
  - Assessment for instructional planning and evaluating outcomes
- **Features of Intensity** -- Time and OTR: Core curriculum including large and small group activities focused on curricular goals and objectives
  - Group size: Combination of large - (18-24 students) and small-group (5-10 students) activities
  - Focus: Curricular goals and objectives
  - Specificity of instructional design: Low to moderate specificity of instructional design
  - Teacher involvement: Combination of teacher-led and independent activities
- **Progress Monitoring** -- IGDIs like GGG in each of the 4 curriculum areas administered quarterly to all children
- **Data-based Decision Making** -- Local norms establish expected level and rate of performance

Features of T1

[Tier 2: Targeted Instruction](#)  
[Tier 3: Intensive Instruction](#)

All children screened for RTI quarterly

# Challenge: Progress Monitoring Measurement (PMM)

- What we know
  - It is possible to develop and validate PMM for young children in an RTI approach
  - PMM requires frequent measurement and sensitivity to short-term growth in order to support intervention decision making
- What do we need to learn?
  - That use of these measures actually improves child outcomes?
  - What are the best approaches to determining benchmarks and decision rules for moving children in and out of tiers?
  - What additional PMM are needed for what outcomes?

# Challenge: Progress Monitoring Measurement (PMM)

- What research is needed to chart the path?
  - Studies of existing, technically adequate PMM demonstrating that use actually improves child outcomes – that PMM adds uniquely to effect sizes.
  - Studies comparing the pros and cons of alternative approaches to determining benchmarks and decision rules for moving children in and out of tiers
  - Studies validating new PMM for additional outcomes

# Best benchmark in EC?: All have been recommended

- Likelihood of a child attaining subsequent skill given current level of proficiency (based on predictive research)
- Level of proficiency plus growth (based on normative research)
- Growth alone (based on normative research)
- Early Interventionist judgment (professional expectation)



## Individual Growth and Development Indicators for Infants and Toddlers

*Registered Users Login Here*

Username:

Password:

[Forgot Password?](#)

- [Home](#)
- [Getting Started](#)
- [Frequently Asked Questions](#)
- IGDI Information & Forms
  - [IGDI Descriptions](#)
  - [Forms and Instructions](#)
  - [Administration Checklists](#)
  - [Scoring Definitions](#)
  - [Toys Required](#)
- IGDI Child Data System
  - [Logging In](#)
  - [Sample Reports](#)
  - [Fees](#)

[Home](#) >> [IGDI's for Older Kids](#) >>

### IGDI's for Older Kids

This website focuses on IGDI measures of infant/toddler development (birth to 36 months). For information and tools to measure later development, visit one of the websites below. The graphic below illustrates how our infant/toddler measures link with the literacy measures available through the [Get it Got it Go!](#) and [DIBELS](#) websites.

### IGDI Measures and Tools from Birth to 3rd Grade

..... Birth - 3 ..... 3 - 5 years ..... K - 3rd Grade .....

Infant/Toddler IGDI's (This website)	Preschool IGDI's ( <a href="#">Get it, Got it, Go!</a> )	DIBELS ( <a href="#">DIBELS website</a> )
Toy play follows function Multiple-word utterance Single-word utterance Vocalization Gesture	Letter Naming Alliteration Rhyming Picture Naming	Oral Reading Nonsense Word Phoneme Segmentation Initial Sounds Letter Naming

[Get it Got it Go!: Tools for Improving Children's Developmental Outcomes](#) (Preschool)

[Dynamic Indicators of Basic Literacy Skills \(DIBELS\)](#), University of Oregon (K-3rd Grade)

Continuum of PPM of early communication, early literacy, through oral reading

# Challenge: How do we make RTI Problem Solving Systematic and Easier to Implement?

- What we know
  - Some RTI problem solving/decision making approaches have been shown effective in K-5/6 special education
- What do we need to learn?
  - What are the best approaches to use with young children?
  - What component steps are needed, which are not, any unique to EC?
  - How do we make it easy and routine?

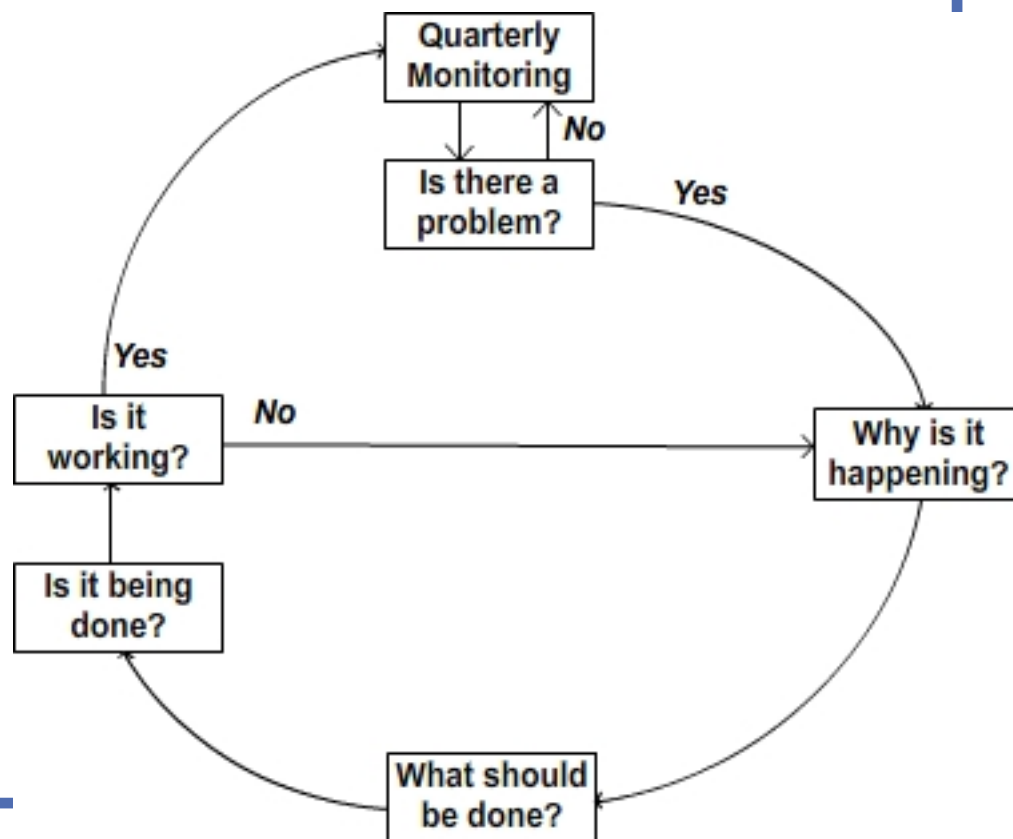
# Challenge: Making Problem Solving Systematic and Easier to Implement

- What research is needed to chart the path?
  - Studies demonstrating that specific problem solving strategies lead to improved child outcomes
  - Studies comparing alternative problem solving strategies
  - Studies demonstrating which component steps are needed, which are not
  - Studies demonstrating the benefit of technology supports for Early Interventionists engaged in individual problem solving

# Problem Solving/Decision Making Model and Supports for Practitioners

## Data-based Individualization Made Easy, Automatic, and More Effective When Supported Online

1. Helps identify children who may have a delay
2. Helps identify why the delay might be happening
3. Recommends strategies appropriate for child's proficiency level
4. Checks that strategies are being carried out
5. Reports whether or not the strategies are working; and what to do next

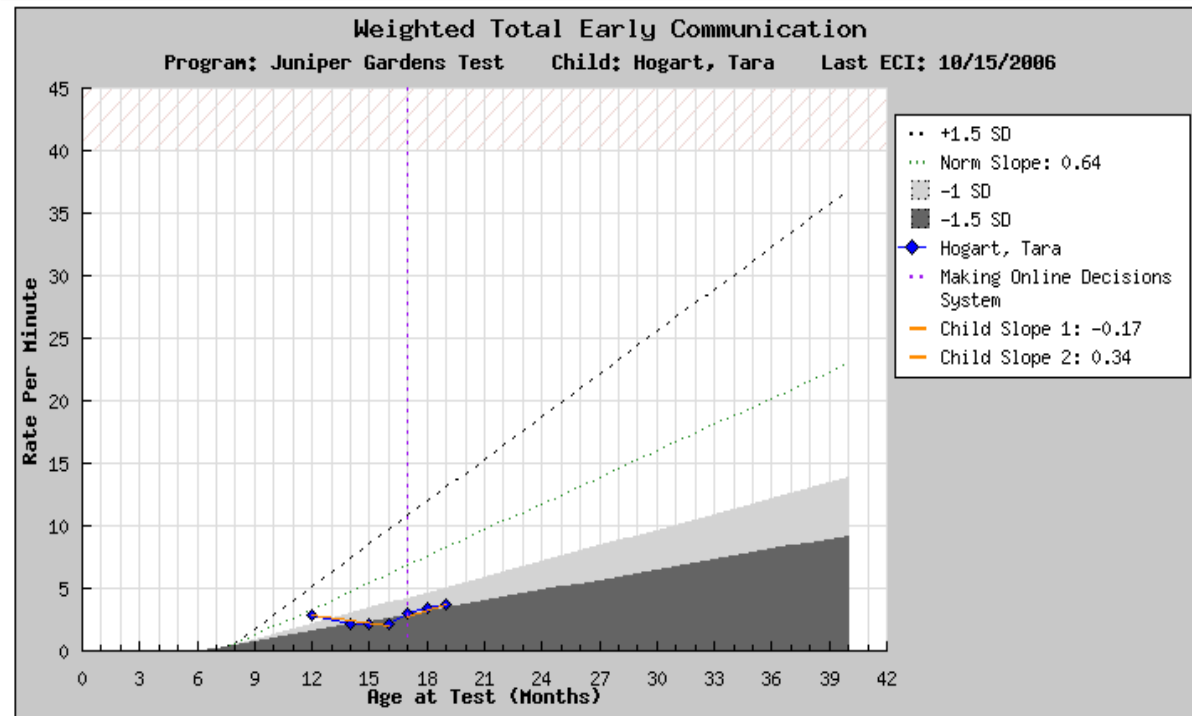


## MOD for child Tara Hogart

Currently on Step 4 - Home Visitor's Fidelity Follow-up Checklist

Step	Complete?	Completed on
<a href="#">Step 1 - Is there a problem?</a>	Yes	02/17/2008
<a href="#">Step 1 - Is there a problem?</a>	Yes	02/17/2008
<a href="#">Step 2 - Why is it happening?</a>	Yes	02/17/2008
<a href="#">Step 3 - What should be done?</a>	Yes	02/17/2008
Step 4 - Is it being done?		
<a href="#">Step 4 - Home Visitor's First Fidelity Checklist</a> <a href="#">View/Print First Checklist</a> <i>(for observation done on 07/12/2006)</i>	Yes	02/17/2008
<a href="#">Step 4 - Home Visitor's Fidelity Follow-up Checklist</a> <a href="#">View/Print Follow-up</a> <i>(for observation done on 08/13/2006)</i>	Yes	02/17/2008
<a href="#">Step 4 - Home Visitor's Fidelity Follow-up Checklist</a> <a href="#">View/Print Follow-up</a> <i>(for observation done on 09/14/2006)</i>	Yes	02/17/2008
<a href="#">Step 4 - Home Visitor's Fidelity Follow-up Checklist</a> <a href="#">View/Print Follow-up</a> <i>(for observation done on 10/15/2006)</i>	Yes	02/17/2008

[Step 5 - Is it working?](#)



# Why is this happening?

## Rule out first hypotheses

### Why is this happening?

---

\*Part 1: Does the child have a medical problem that might affect his/her language (for example an ear infection, loss of hearing, sinus problem, redness around the ears, or ear tubes)?

Yes  No  Don't Know

\*Part 2: Have there been any recent family changes that might affect his/her language (for example a new baby, divorce or separation, new spouse or partner, or other type of change with the primary caregiver)?

Yes  No  Don't Know

\*Part 3: Have there been any recent changes in the child's home or child care environment that might affect his/her language (for example, moving to a new home or day care, or a new language being spoken in the home?)

Yes  No  Don't Know

Next >

Continue Later

# Supporting the Practitioner's Use EBP

## What should be done? - Selected Strategies

[View MOD details for this child](#)

Please print a copy of this page and a copy of the [First Checklist](#), and take both of them with you the next time you visit this family. Be sure to complete the checklist so you can enter it into the MOD.

### General Language Strategies

#### Learning to Talk

Children learn to talk by hearing others talk to them. You can help your child learn to talk.

#### Things to Do and Say

- Focus on the same thing
  - watch your child; talk about what he or she looks at
  - move objects into your child's view to talk about them
- Follow your child's lead
  - imitate your child's movements
  - imitate your child's sounds
- Have pretend conversations
- Talk about your child's sounds and movements

- Set up a regular daily schedule
  - for eating
  - for bathing
  - for reading
  - for napping
  - for playing
- Use similar words each time you play with, feed, bathe, and read with your child
- Make positive comments
  - You're such a good baby
  - What a happy boy/girl!

Kansas Department of Social and Rehabilitative Services

13

Language Activity #2

# Data-based Recommendations for Improving the Child's Language Learning Environment

## What should be done?

[View MOD details for this child](#)

### RECOMMENDED STRATEGIES AND ROUTINES FOR TARA HOGART

At 15 months of age, Tara Hogart is communicating using up to 1 Gestures and/or 2.5 Vocalizations per minute, so these strategies will focus on encouraging gestures and sounds.

The types of strategies used to promote communication for children at this level include:

- Responding to a child when they make vocalizations like cooing, babbling, or making sounds. This helps a child to learn that when they vocalize they get attention from others
- Showing an interest in what the child is playing with, looking at, or exploring and commenting or labeling the toy or activity
- Expanding on the child's sounds and gestures by saying words so that a child hears the words that are related to objects or activities they are interested in and vocalizing about or gesturing to

Child Information (at last mod-eligible observation)	
Name:	Tara Hogart
Age:	15 months
Gestures:	1.33
Vocalizations:	0.83
Single Words:	0
Multi Words:	0

In the *Language Intervention Tool Kit* (Linda K. Crowe, © 2002), these strategies are identified as *Preverbal* and are described on pages 13 – 21 of the *Tool Kit*. Specific strategies and activities for children who are using mostly gestures and vocalizations are suggested on the pages listed below for the following routines. Please select one or more of the routines below that you think Tara Hogart's caregiver would be most likely to use:

- Feeding (pp. 13 - 14)
- Diapering (pp. 13, 15)
- Bathing (pp. 13, 16, & 19)
- Reading (pp. 13, 20)
- Drawing/Writing (pp. 13, 21)

**Narrowing the Recommendation  
based on child performance**

In the *Promoting Communication Manual* (Juniper Gardens Children's Project, © 2003-2004), suggestions are given for using strategies with children communicating mostly through gestures and vocalizations. Examples of the strategies and their use across routines and activities are provided in sections arranged by child communication level. When using this information, it may be most helpful to begin by picking a strategy or two, and then gradually adding more strategies across routines as they become easier to use. Please select one or more of the strategies below that you think Tara Hogart's caregiver would be most likely to use:

- Following Child's Lead (pp. 14, 15)
- Commenting and Labeling (pp. 19, 20)
- Imitating and Expanding (pp. 24, 25)
- Providing Positive Attention (pp. 39, 40)

Before your next home visit, please print these selected strategies and review them with Tara Hogart's caregiver. Along with your chosen strategies, there will be a brief checklist for you to complete and enter into the MOD the next time you enter ECI data for Tara Hogart.

[Previous](#)

[1](#) [2](#) [3](#)

[View & Print All Selected Strategies](#)

[View & Print Later](#)

# Challenge: Tier 2 and 3 Intervention Efficacy

- What we know
  - Some intervention components are supported by research
  - However, too few evidence-based T2 and T3 interventions exist for some outcomes
- What do we need to learn?
  - Which intervention components are needed to boost intensity and accelerate individual progress learning key skills at T2 and T3?
  - What differentiates T2 and T3 from one another, and from T1?

# Challenge: Tier 2 and 3 Intervention Efficacy

- What research is needed to chart the path?
  - Studies are needed of intervention component combinations designed to boost intensity; and thereby, accelerate progress learning key skills at T2 and T3
  - Studies are needed of the component procedures that differentiate T2 and T3 from one another and from T1?
  - Studies are needed that inform the best ways of advising early interventionists about how to use EBP to meet individual children's specific needs

# Response to Intervention in Early Childhood



[Home](#)

[About Us](#)

[RTI](#)

[Research](#)

[Resources](#)

[Contact Us](#)

- [Progress Monitoring](#)
- [Interventions](#)
- [Proposed Tier Prevention Model for Language and Early Literacy](#)

## T-2 Targeted Instruction

- **Children served**--Children who are not making adequate progress in T1
- **Intervention practices: Supplemental to T1**; strategies for increasing Opportunities to Respond in the 4 curricular areas delivered in center activities that are paraprofessional-supported
- **Features of Intensity**--
  - Time and OTR: 15-20 minutes of instruction in independent and paraprofessionals-supported skill focused activities
  - Group size: Small-groups of 3-6 students
  - Focus: Curricular goals and objectives
  - Specificity of instructional design: Moderate to high specificity of instructional design on targeted skills from core curricula
  - Teacher involvement: paraprofessionals-supported center activities
- **Progress Monitoring**--IGDIs like GGG in each of the 4 curriculum areas administered monthly; Weekly mastery monitoring probes designed to measure the skills being taught in specific curricular domains
- **Data-based Decision Making**--Ongoing mastery monitoring results in targeted intervention; Targeted services delivered to children who score below the expected rate of progress (ID or more below norms)

Increased instructional intensity components

[Tier 1: Universal Instruction](#)  
[Tier 3: Intensive Instruction](#)

More frequent PM

# Response to Intervention in Early Childhood



- [Home](#)
- [About Us](#)
- [RTI](#)
- [Research](#)
- [Resources](#)
- [Contact Us](#)

- [Progress Monitoring](#)
- [Interventions](#)
- [Proposed Tier Prevention Model for Language and Early Literacy](#)

## T-3 Intensive Instruction

- **Children served** -- Children who are not making adequate progress in T2
- **Intervention practices** -- Supplemental or alternative to T1 instruction; systematic scope and sequence of skills, scripting of lessons, explicit direct teaching, scaffolded learning, sufficient practice to learn skills to mastery, ample opportunities to practice, immediate teacher feedback
- **Features of Intensity**--
  - Time and OTR: Additional 15-30 minutes of instruction in small group paraprofessional-led lessons with increased OTR using carefully scripting of lessons
  - Group size: Small-groups of 1-3 students
  - Focus: Restricted scope and sequence of skills focusing on prerequisite and high priority skills
  - Specificity of instructional design: High specificity of instructional design for all skill areas
  - Teacher involvement: Scripted paraprofessional-led activities provide ample opportunities for guided practice of skills with immediate teacher feedback
- **Progress Monitoring** -- IGDIs in each of the 4 curriculum areas administered monthly; Weekly curriculum-based assessments designed for measuring progress in acquisition of high priority skills targeted by T3 intervention
- **Data-based Decision Making** -- Ongoing progress monitoring results in targeted intervention; Progress in T3 can lead to T2 or T1 services; Continued lack of progress in T3 results in special education services with individualized intervention addressing unique needs

Increased Instructional Intensity Components

[Tier 1: Universal Instruction](#)

[Tier 2: Targeted Instruction](#)

# Challenge: Research on Implementation Feasibility

- What we know
  - Fidelity of implementation moderates children's learning outcomes
  - Time to full implementation of EBP also moderates children's learning outcomes
- What do we need to learn?
  - Under what conditions of support:
    - Can program staff use PMM with fidelity?
    - Can decision making approaches be implemented with fidelity?
    - Can 3 tiers of intervention be implemented by program staff with fidelity?
  - How are Part C and B (619) services linked with 3 tiers of support?

# Challenge: Research on Implementation Feasibility

- What research is needed to chart the path?
  - Studies are needed examining the effects and costs of alternative supporting conditions on implementation feasibility
  - Supporting conditions include:
    - Administrative policies
    - Program-level goal setting, evaluation, and improvement
    - Interagency coordination
    - Program or school-based decision teams
    - Online data supports (e.g., data collection, reporting)
    - Online case management and intervention advice linked to PMM, etc.
  - Studies are needed demonstrating linkage between Part C and/or Part B services and 3 tiers of support – T1, T2, and T3

## Home Visitor's First Fidelity Checklist

[View MOD details for this child](#)

After the ECI assessment indicates a need for more frequent monitoring, and you have selected a specific intervention strategy, please check either Yes or No to each step below to indicate whether or not it has been done.

Please only use this checklist the first time you go over the intervention materials. On each visit after this one, use the Home Visitor's Fidelity Follow-Up Checklist.

Child:

Tara Hogart

\*Assessor :

a, a

\*Date of visit:

Jul 12 2006

\*What intervention strategy(s) did you select? (or, what recommendations did you print and give to the parent/guardian?)

Following Child's Lead  
Diapering  
Bathing

1. *I explained the concern to the parent/caregiver and showed them the ECI graph	<input checked="" type="radio"/> Yes <input type="radio"/> No
2. *I talked to them about how they can help by using the strategy(s) across their daily routines.	<input type="radio"/> Yes <input checked="" type="radio"/> No
3. *I helped them pick one (1) or two (2) routines in which they could do the strategies.	<input checked="" type="radio"/> Yes <input type="radio"/> No
4. *I gave them the materials related to the strategies.	<input type="radio"/> Yes <input type="radio"/> No
5. *I modeled/demonstrated how the parent/guardian should use the strategy(s).	<input checked="" type="radio"/> Yes <input type="radio"/> No
6. *I role-played the strategies together with the parent/caregiver	<input type="radio"/> Yes <input checked="" type="radio"/> No
7. *I observed the parent/caregiver perform the strategy(s).	<input checked="" type="radio"/> Yes <input type="radio"/> No
8. *I showed them where to record their usage of the strategy(s) on the routines sheet.	<input checked="" type="radio"/> Yes <input type="radio"/> No
9. *I asked the parent/guardian how they plan on using the strategy(s) across the routines.	<input checked="" type="radio"/> Yes <input type="radio"/> No
10. *I suggested that they keep the routines sheet and intervention handout in a place they will see it every day.	<input checked="" type="radio"/> Yes <input type="radio"/> No
11 *I asked if they had any questions.	<input checked="" type="radio"/> Yes <input type="radio"/> No

General Comments/Notes

[Next >](#)

[Continue Later](#)

[Skip the Initial Checklist](#)

Is it  
being  
done?

# Summary and transition to Discussion

- Gaps currently exist in our knowledge and tools needed to implement RTI
- Priorities for moving forward appear to be:
  - Scaling up use of existing PMM
  - Building new PMM measures where needed
  - Building, demonstrating, and scaling up evidence-based practice
  - Demonstrating and validating the benefits of 3 tiers of support implemented to fidelity
- For additional information see online at <http://www.crtiec.org> ([critique.org](http://critique.org))

# Some Possible Discussion Questions

- What adaptations are needed to Rtl, given that most early childhood programs are *not* universal?
- Will implementation of Rtl affect the focus and type of curriculum and instruction provided in preschool classrooms?
- How might we move toward circumstances where more preschool classrooms have evidence-based curricula in place as their “Tier 1” interventions?
- What does it take to *reduce risk now and in the future*? Do we have evidence that we can prevent anything?