

# Response to Intervention/Multi-Tiered Systems of Support

## Problem-Solving in an RtI/MTSS Model

New York RtI Technical Assistance Center Webinar Series

Webinar #4

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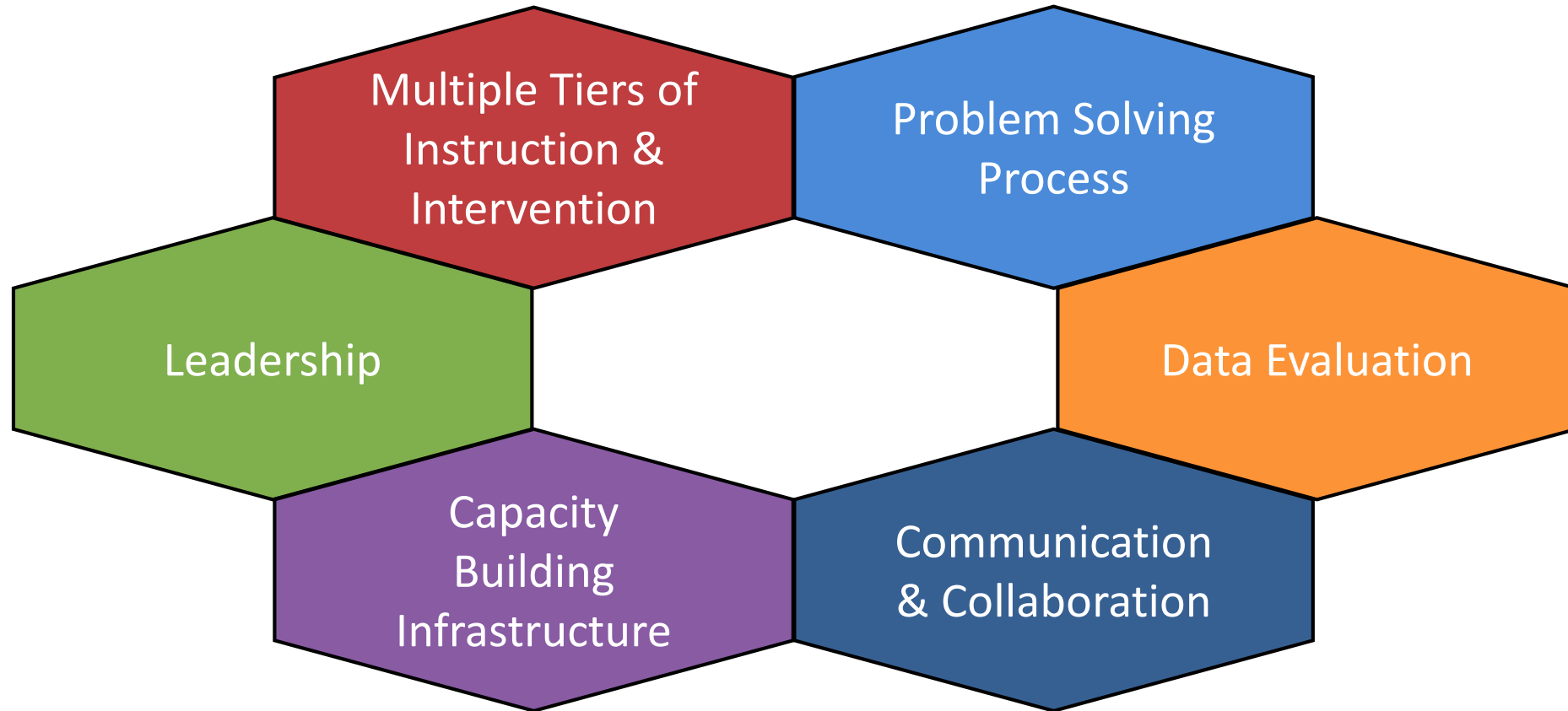


- Brief Review of MTSS components—where does problem-solving fit in?
  - Identify the steps in the 4- step problem-solving process.
  - Recognize how to complete each step with appropriate data and fidelity
  - Name the critical elements of implementation fidelity and sufficiency
  - Describe the decision rules regarding effective response to instruction and the intervention decisions based on those rules
- Apply today's learning to a case example

# Important Links

- <http://www.floridarti.usf.edu>
  - Technical Manual
- <http://www.florida-rti.org>
  - Guiding Tools for Instructional Problem-Solving (Gtips-R)
- <http://floridarti.usf.edu/pattan/index.html>
- [www.Intensiveintervention.org](http://www.Intensiveintervention.org)

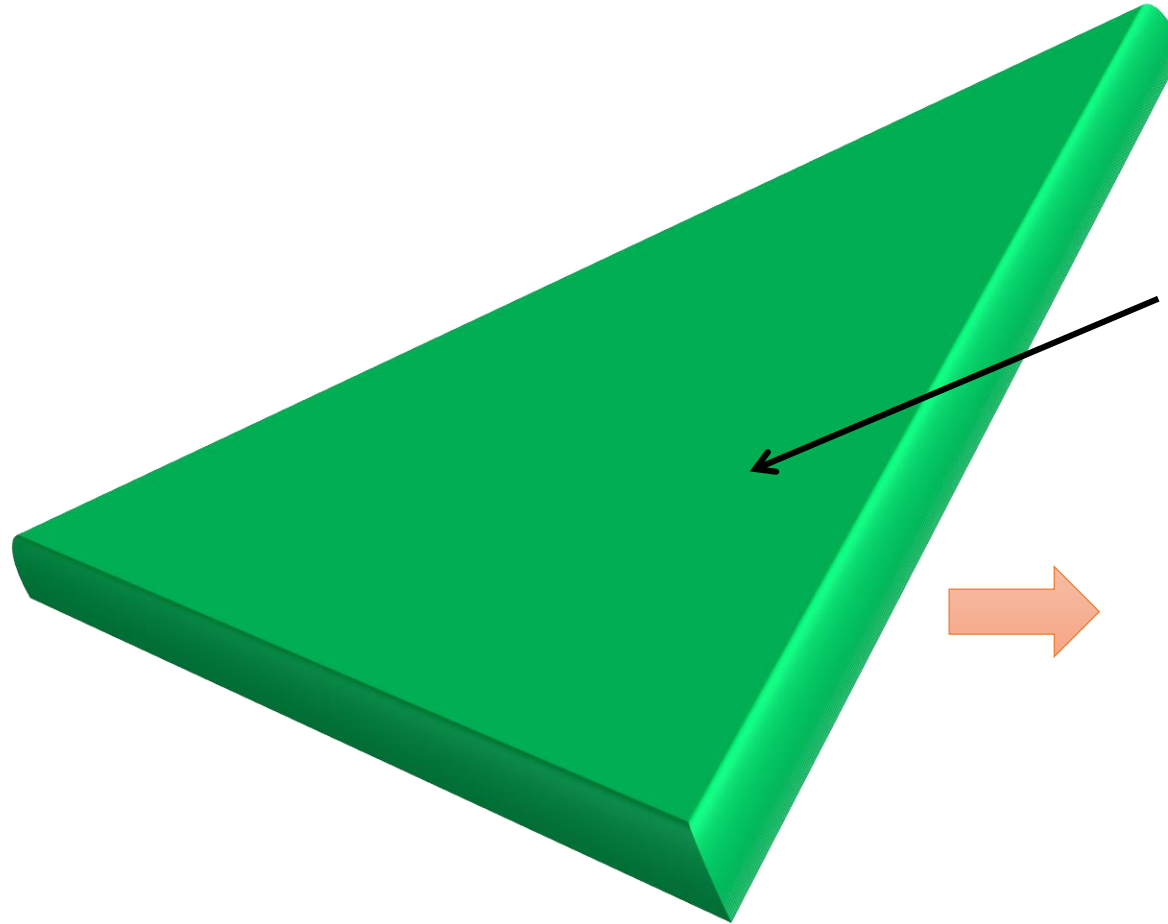
# Critical Components of MTSS



*MTSS is a framework to ensure successful education outcomes for ALL students by using a data-based problem solving process to provide, and evaluate the effectiveness of multiple tiers of integrated academic, behavior, and social-emotional instruction/intervention supports matched to student need in alignment with educational standards.*

# TIER I: Core, Universal Academic and Behavior

*GOAL:* 100% of students achieve at high levels



**Tier I:** Implementing well researched programs and practices demonstrated to produce good outcomes for the majority of students.

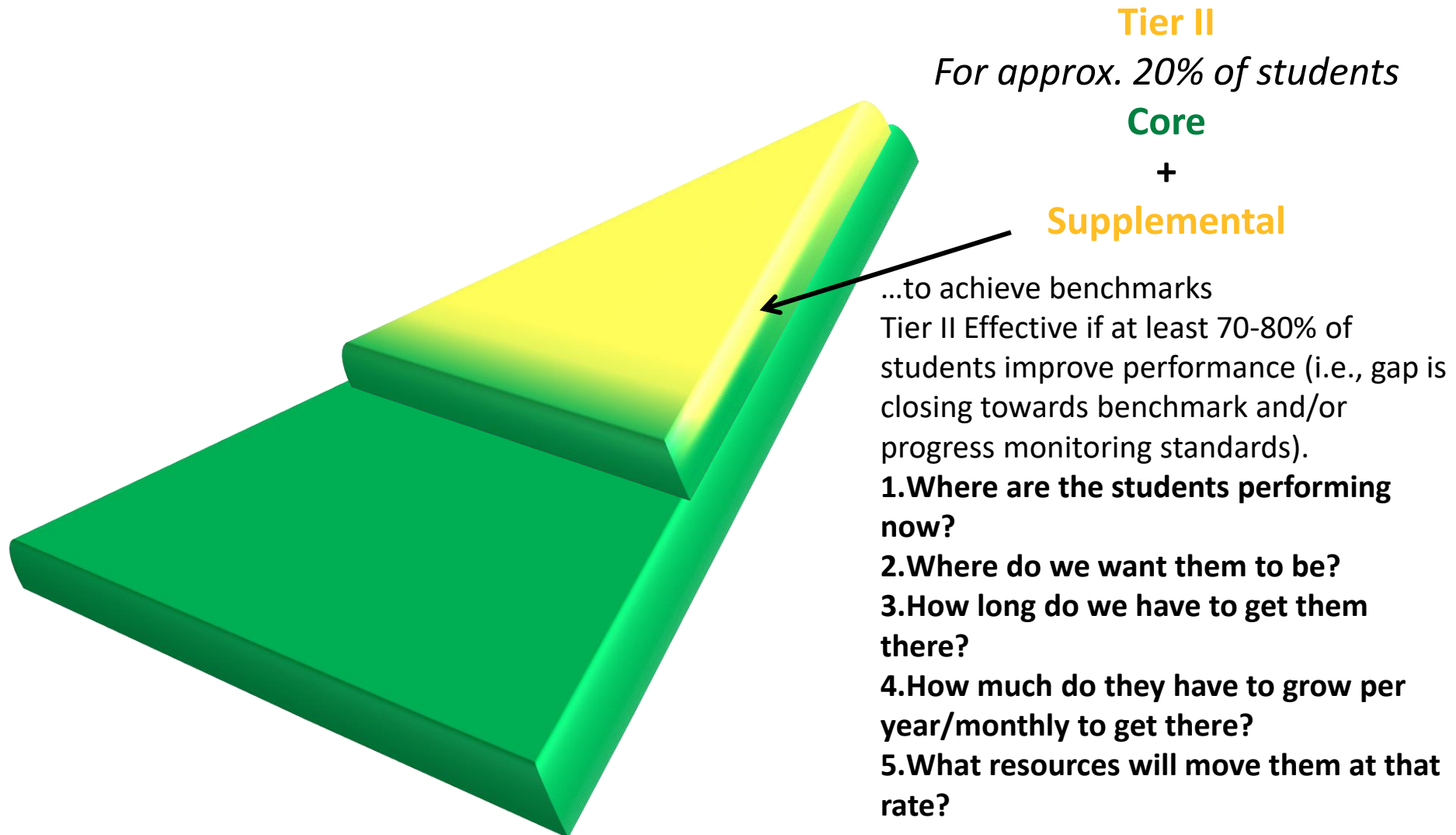
**Tier I:** Effective if *at least* 80% are meeting benchmarks with access to Core/Universal Instruction.

**Tier I:** Begins with clear goals:

1. What exactly do we expect all students to learn ?
2. How will we know if and when they've learned it?
3. How you we respond when some students don't learn?
4. How will we respond when some students have already learned?

Questions 1 and 2 help us ensure a guaranteed and viable core curriculum

# TIER II: Supplemental, Targeted



# TIER III:

## *Intensive, Individualized*

**Tier III**  
*For Approx 5% of Students*

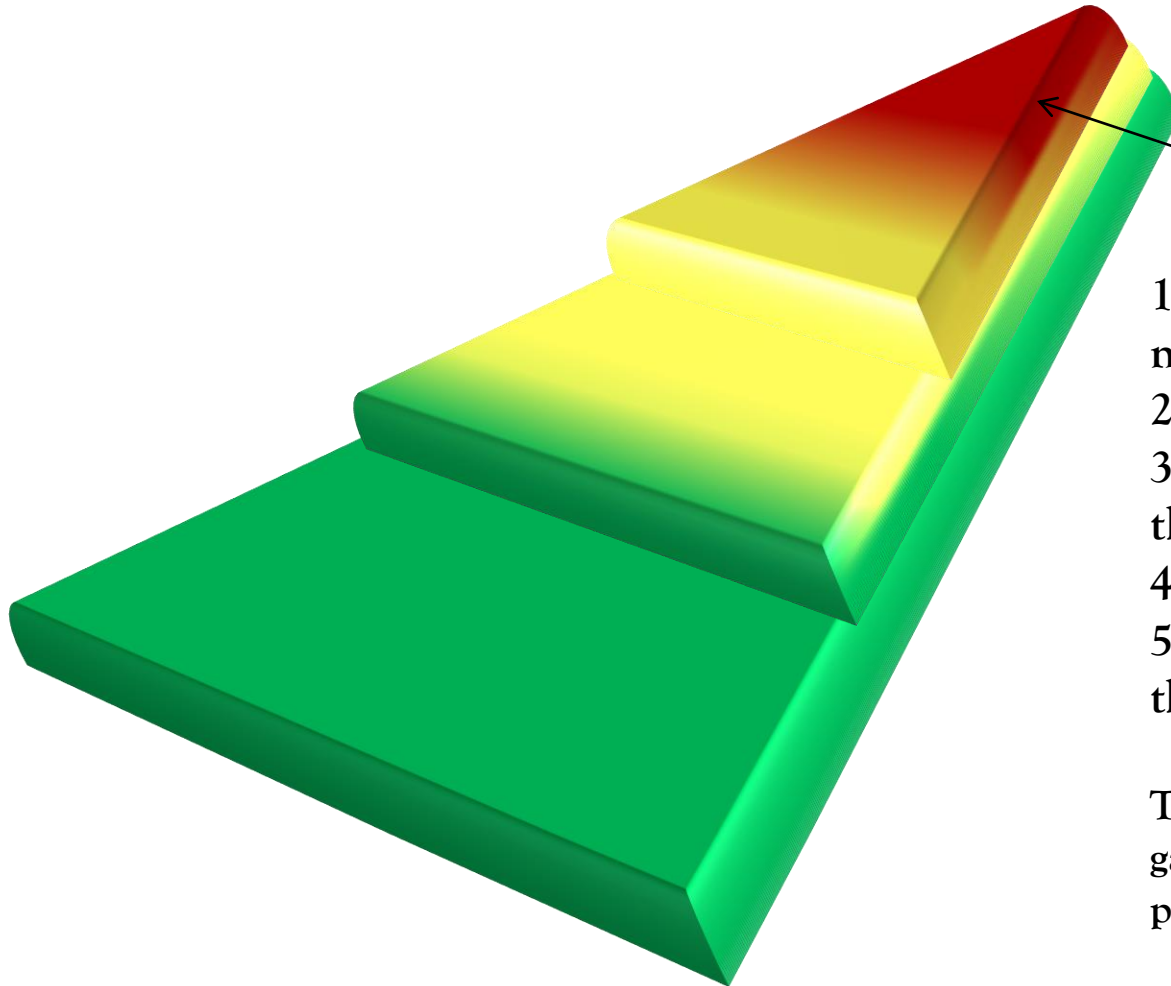
**Core**

+

**Supplemental**

+

**Intensive Individual Instruction**  
...to achieve benchmarks



1. Where is the student performing now?
2. Where do we want him to be?
3. How long do we have to get him there?
4. What supports has he received?
5. What resources will move him at that rate?

Tier III Effective if there is progress (i.e., gap closing) towards benchmark and/or progress monitoring goals.

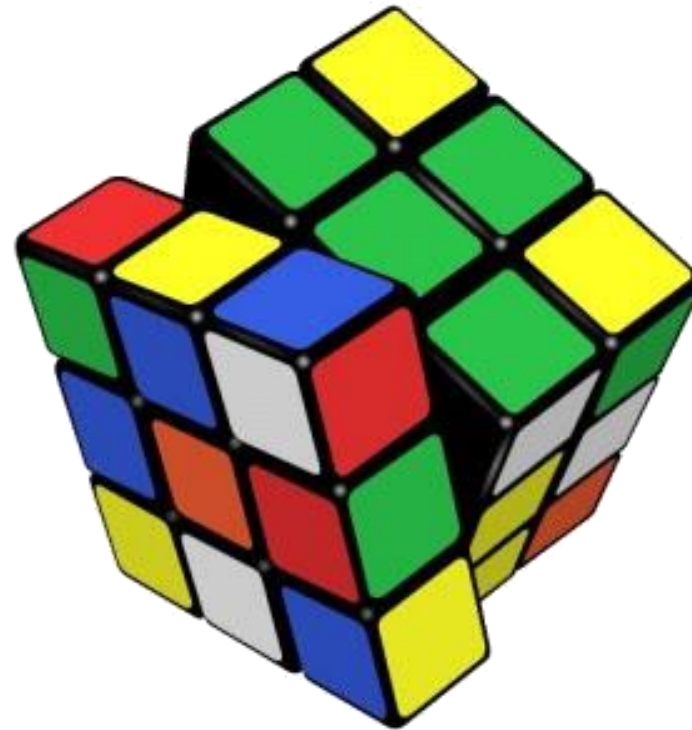
When we are not happy with  
our data and we do not know  
what to do--

Then we Problem-Solve!!



# Problem-Solving is the Engine That Drives Instruction and Intervention

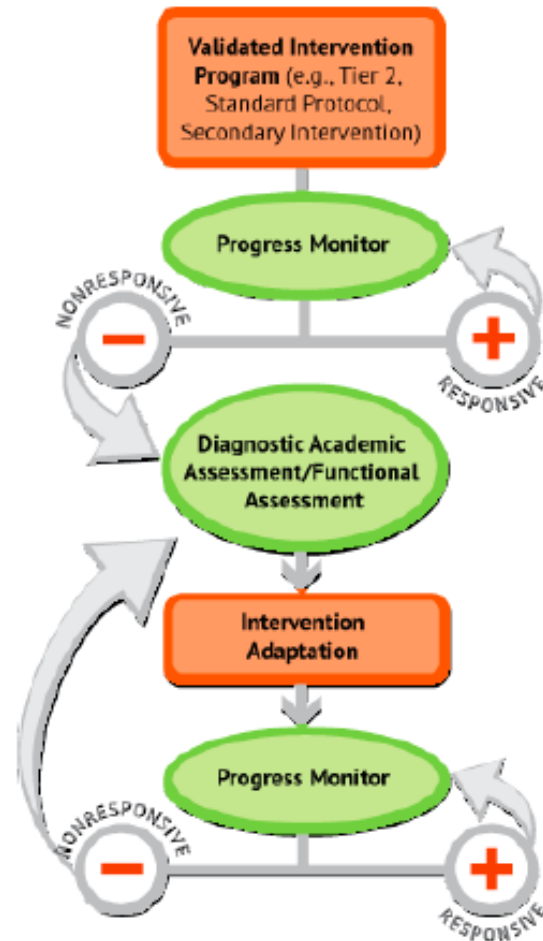
*It is the  
MOST  
Critical Skill  
A Leader Can  
Possess*



K. Leithwood, 2007

# Data-Based Individualization (dbi)

[www.intensiveintervention.org](http://www.intensiveintervention.org)



# 4 Common Sense Questions That Drive Problem-Solving

- What do we want students to know and be able to do? (Step 1)
- Why are they not doing it? (Step 2)
- What are we going to do about it? (Step 3)
- Did it work? (Step 4)

# Some Assumptions

- Step 1 is the most critical. It sets the focus, the baseline and the outcome.
- Data collection is driven by the hypotheses to be answered. Data are ***dependent*** measures, dependent on the question—not pre-determined.
- Intervention impact is a function of:
  - The RIGHT intervention
  - Delivered with sufficient dosage
  - Implemented with integrity and support

# Really Important...

- A VERY strong relationship exists between the number of components of the Problem-Solving process completed with fidelity and the impact of the instruction/intervention on student growth levels. (Flugum, Reschly and others)
- Therefore, implementing the PSP with Fidelity is important (Fidelity Checklists)

School: _____	Grade-Level: _____	Date: _____
FOCUS(Group/Student): _____ (Parent Notified: When: _____ By Whom: _____)		
Initiator of this Form: _____	Attendees: _____	
Facilitator: _____	Time-Keeper: _____	Note-Taker: _____

### Step 1: Define the Problem. Identify the Goal *(What is the goal?)*

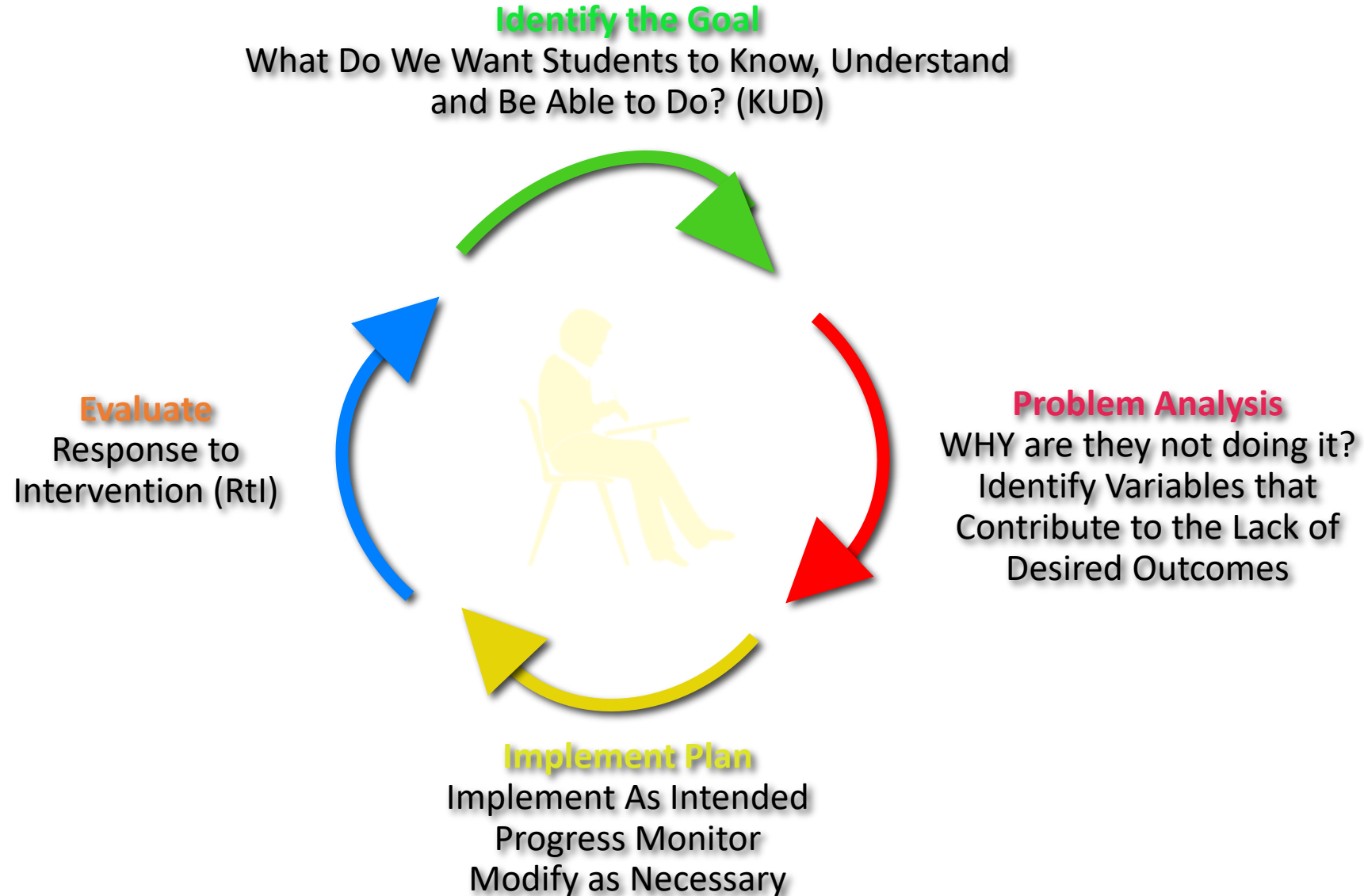
Identify initial concern (What data raised concerns?)	
Using data, what is the current level of performance?	
Using data, what is the benchmark level?	
Using data, what is the peer performance?	
What is the gap?	
GOAL:	

### Step 2: Problem Analysis *(Why is the goal not occurring?)*

Generate multiple hypotheses addressing why the goal is not occurring.

HYPOTHESIS #1 I C E L <small>Instruction, Curriculum, Environment, Learner</small>	The goal is not occurring because . . .
Prediction If . . . , then . . .	
Relevant Data R I O T <small>Review, Interview, Observe, Test</small>	
Validated? Yes/No	

# Problem Solving Process



# Steps in the Problem-Solving Process

## 1. Problem Identification

- Identify replacement behavior
- Data- current level of performance
- Data- benchmark level(s)
- Data- peer performance
- Data- GAP analysis

## 2. Problem Analysis

- Develop hypotheses (brainstorming)
- Develop predictions/assessment

## 3. Intervention Development

- Develop interventions in those areas for which data are available and hypotheses verified
- Proximal/Distal
- Implementation support

## 4. Response to Intervention (RtI)

- Frequently collected data
- Type of Response- good, questionable, poor



# Poll #1

Select all that apply:

1. My district has a clearly identified problem-solving process that is used in all schools.
2. My school has a clearly identified problem-solving process that is used consistently.
3. My district promotes the use of problem-solving but does not provide a model
4. My district/school does not use a problem-solving process.

# Step 1

Identifying the GOAL

# REPLACEMENT BEHAVIORS

- State your goal and/or *desired* behaviors
  - Academics
    - State approved grade-level benchmarks
    - Desired engagement behaviors
  - Entire school (e.g., % students at proficiency)
  - Groups of students (e.g., reading fluency)
  - Individual students (e.g., improve compliance).
- Behavior should reflect competencies to improve *adaptation*
- Behavior must be measurable, observable or reportable

# Student Achievement Student Performance

- ***Academic Skills***

- Goal setting tied to state/district standards
- Common Core State Standards
- Developmental Standards

- ***Academic Behaviors-Student Engagement***

- Behaviors associated with successful completion of the academic skills
- On-task, self-monitoring, goal setting, content of private speech

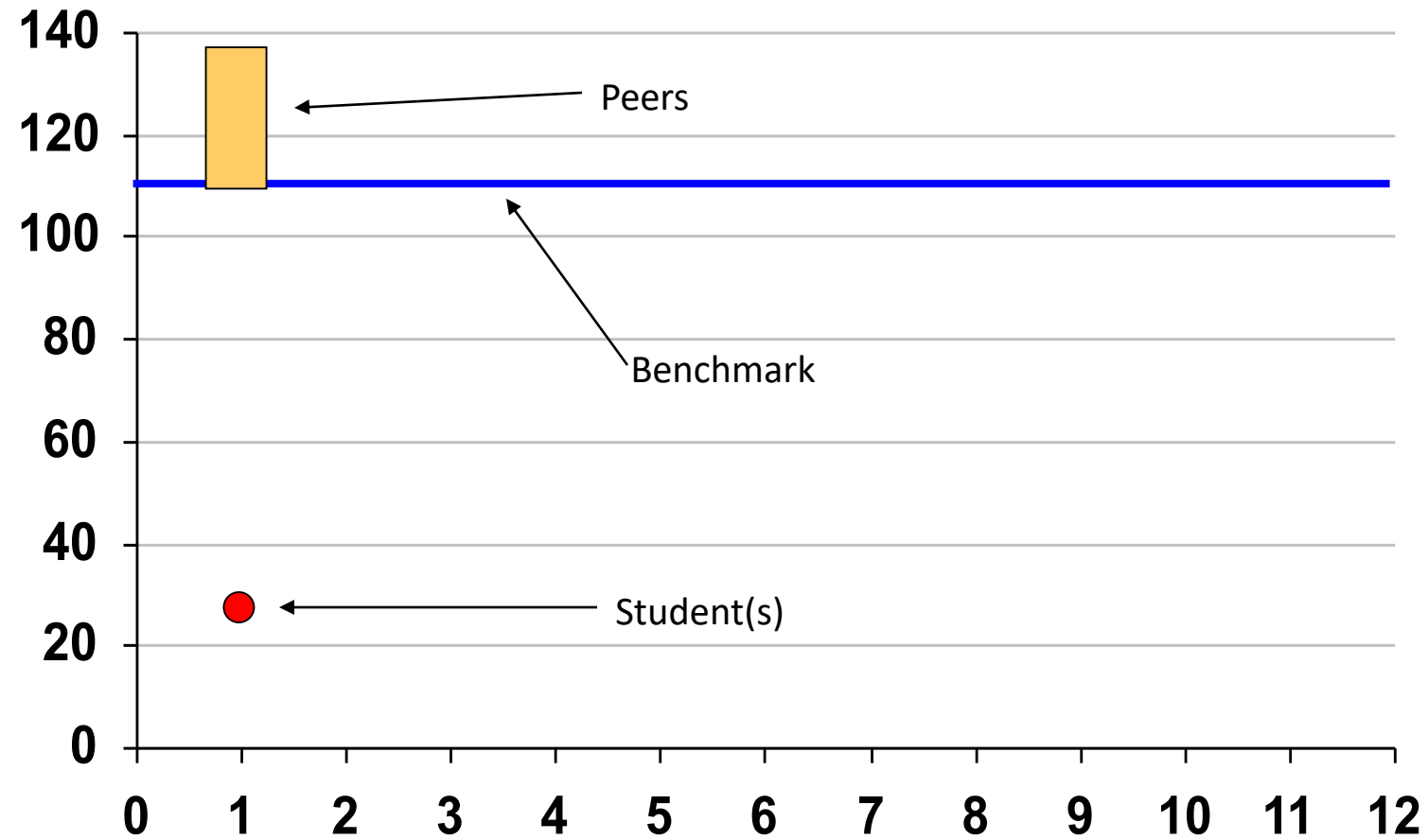
- ***Inter-/Intra-Personal Behaviors***

- Behaviors that support social skills
- Social/emotional development

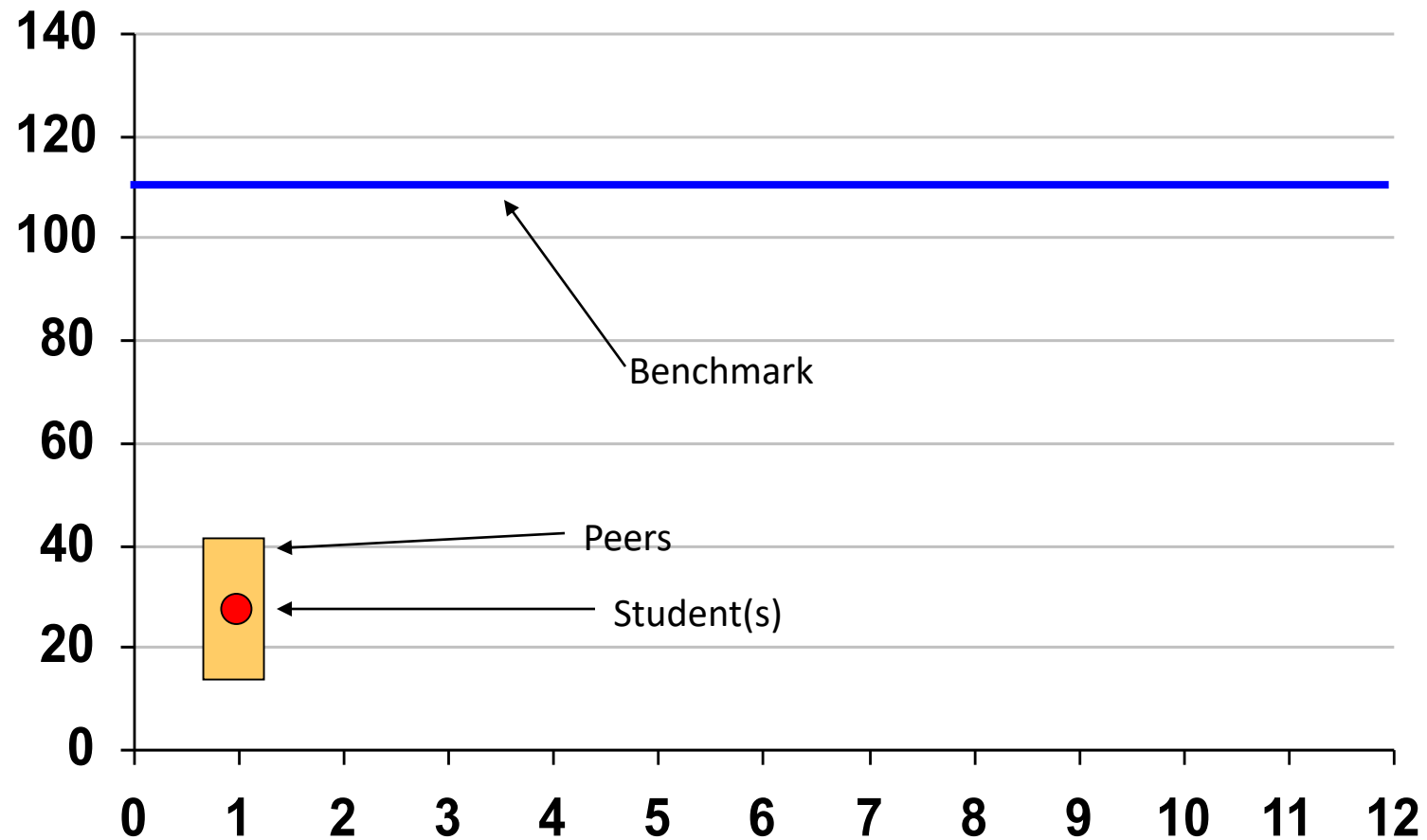
# REPLACEMENT BEHAVIORS

- 90% of the students in first grade will demonstrate reading fluency at district benchmarks by January 15<sup>th</sup> of each year.
- School-wide Office Discipline Referrals (ODRs) will be at or below the \_\_\_\_\_ level monthly.
- 75% of EL students receiving Tier 2 services will achieve district level benchmarks in fluency.

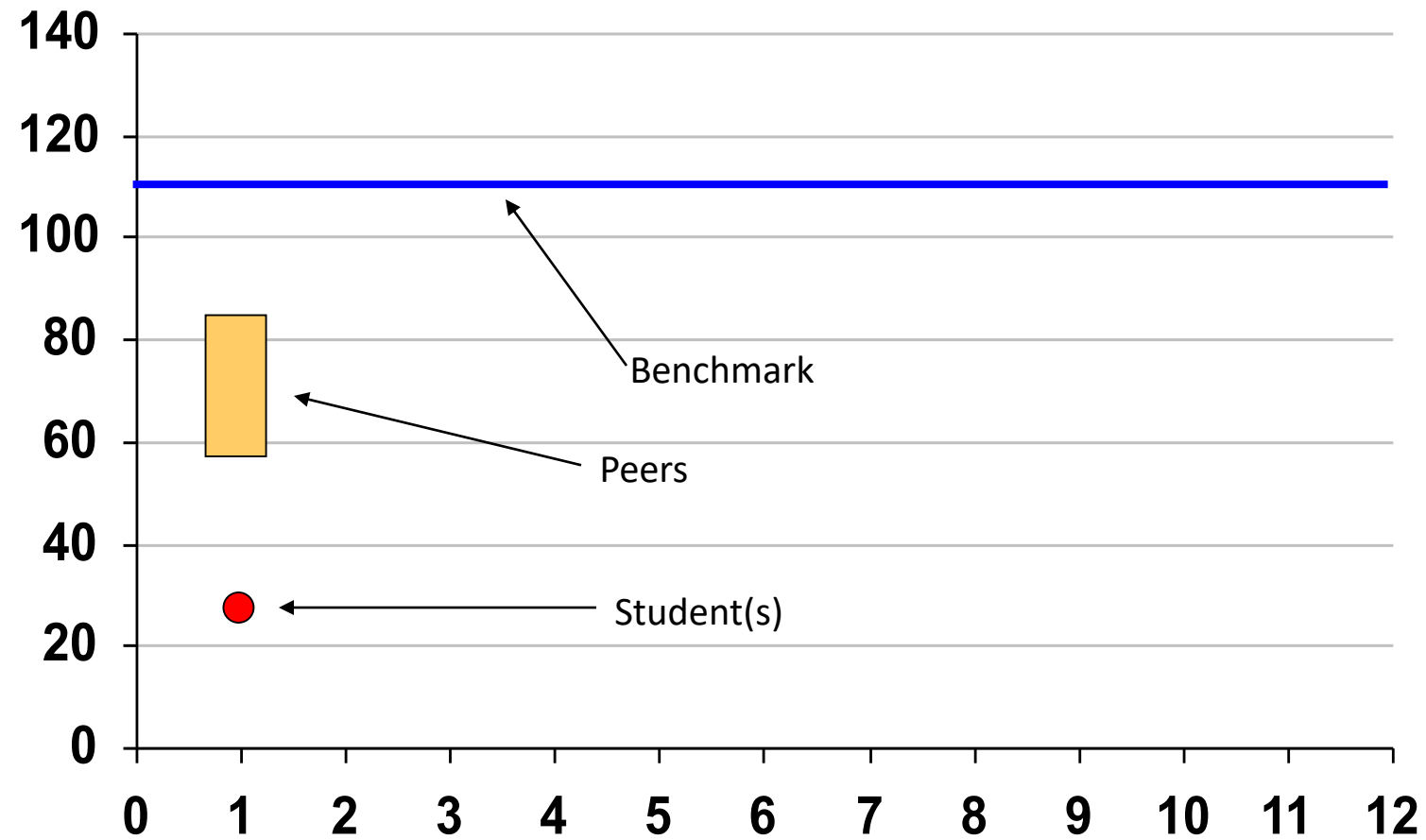
# Problem ID Review



# Problem ID Review



# Problem ID Review





## Poll #2

1. Our team always considers the peer (e.g., same demographic) performance in the problem-solving process.
2. Our team sometimes considers the peer performance in the problem-solving process.
3. Our team never considers the peer performance in the problem-solving process.

# Problem-Solving Process Training

Elementary School Case Example

Using Data to Identify the  
Area of Concern

Test Date	SS	GP	PR	Est. ORF*	Literacy Classification
01/14/2016	350	0.44	1	-	Early Emergent
01/20/2016	441	0.46	7	-	Early Emergent
01/22/2016	461	0.47	11	-	Early Emergent

Test Date	SS	GP	PR	Est. ORF*	Literacy Classification
01/19/2016	462	0.46	11	-	Early Emergent
01/25/2016	462	0.48	11	-	Early Emergent
01/26/2016	507	0.48	22	-	Late Emergent
01/19/2016	513	0.46	23	-	Late Emergent
01/20/2016	522	0.46	26	-	Late Emergent
01/07/2016	530	0.42	28	-	Late Emergent
01/19/2016	540	0.46	31	-	Late Emergent
01/19/2016	540	0.46	31	-	Late Emergent
01/22/2016	540	0.47	31	-	Late Emergent
01/20/2016	540	0.46	31	-	Late Emergent

Test Date	SS	GP	PR	Est. ORF*	Literacy Classification
01/15/2016	548	0.44	34	-	Late Emergent
01/20/2016	550	0.46	34	-	Late Emergent
01/20/2016	551	0.46	34	-	Late Emergent
01/12/2016	558	0.43	37	-	Late Emergent
01/28/2016	576	0.49	42	-	Late Emergent
01/20/2016	581	0.46	44	-	Late Emergent
01/20/2016	583	0.46	45	-	Late Emergent

# Problem Identification

**13 of 64 students become off-track in K in early literacy development. The goal is to move these 13 students to On Watch or higher in the next 4 months.**

# Is Effective Instruction Taking Place At This Grade Level?

Hint: Is 13 significantly more than 20% of 64?

# Steps in the Problem Solving Process

Step 1

Goal Identification

Estimating Goal Attainment

# Steps in the Problem-Solving Process

## 1. Goal Identification

- Identify replacement behavior
  - On-Watch or higher for all K students in literacy
- Data- current level of performance
  - 51 students are On Watch or Higher, 13 are below
- Data- benchmark (desired) level(s)
  - 64
- Data- peer performance
  - 51/64 on track
- Data- GAP analysis
  - 13 students

## 2. Analysis

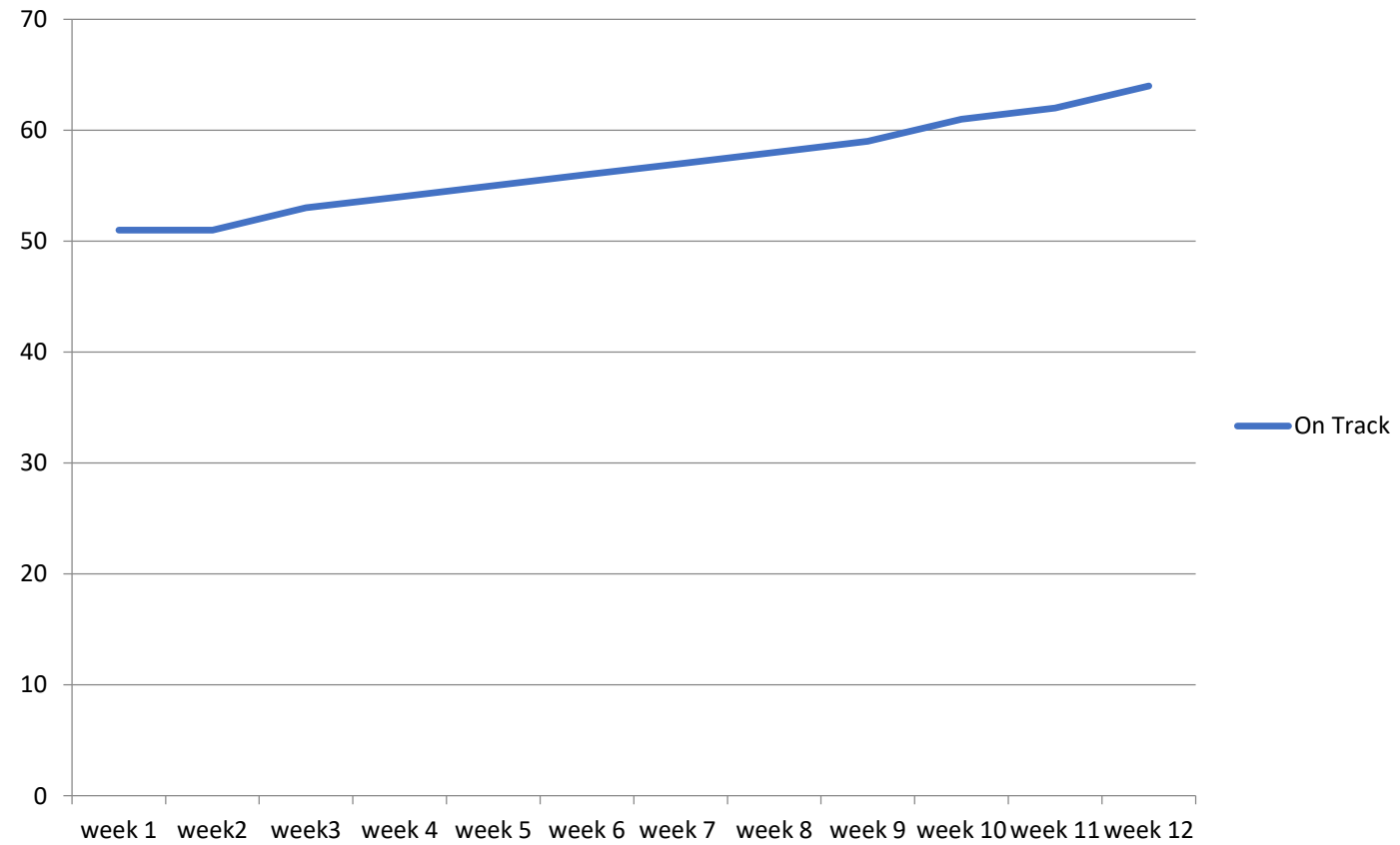
- Develop hypotheses (brainstorming)



# Data-Based Determination of Expectations

- **Current**- 13 Students are off track
- **Benchmark Level**- 0 Below On Watch Level
- **Date**- Want all attaining standards or improving within 12 weeks.
- **Calculate**-
  - Difference between current and benchmark level-  $64 - 51 = 13$
  - Divide by # Weeks- 12
  - Result: # of students improving - 1 per week in order to hit the goal of 64 in 12 weeks.

## On Track



Test Date	SS	GP	PR	Est. ORF*	Literacy Classification
01/14/2016	350	0.44	1	-	Early Emergent
01/20/2016	441	0.46	7	-	Early Emergent
01/22/2016	461	0.47	11	-	Early Emergent

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# MTSS Problem-Solving Team Protocol

## For Instructional Leadership Teams

The purpose of this protocol is to support ILTs in systemically addressing behavior or academic challenges at the school-, grade-, or subject-level.

### Step 1: Define the Problem (What is the problem?)

<b>Identify initial concern</b> <i>What data raised concerns?</i>	
<b>Expected behavior or level of performance</b> <i>What goals were identified for the population of concern?</i>	
<b>Identified problem in terms of the gap in expected performance</b> <i>Be specific. Include where, when, who, and how often, when applicable</i>	

## Problem-Solving Protocol

*The purpose of this protocol is to support systemic problem solving to address behavior and/or academic challenges at the school-, grade-, or subject-level.*

### **Step 1: Define the Problem/Identify Goal (*What is the problem?*)**

<b>Identify initial concern</b> <i>What data raised concerns?</i>	The School Leadership Team reviewed the winter K data in literacy. 13 students are off track for meeting end-of-year goal of On Watch or higher. 2 students are below the 10 <sup>th</sup> PR, 3 between the 10 <sup>th</sup> and 20 <sup>th</sup> PR 4 between the 20 <sup>th</sup> and 30 <sup>th</sup> PR and 4 hovering around the 31 <sup>st</sup> PR.
<b>Expected behavior or level of performance</b> <i>What goals were identified for the population of concern?</i>	The School Leadership Team knows that these 13 students are not going to meet beginning first grade literacy skills unless a significant intensification of instruction occurs for these students. The goal is to have all 64 students in K On Watch or higher at the end of the year.
<b>Identified problem in terms of the gap in expected performance</b> <i>Be specific. Include where, when, who, and how often, when applicable</i>	51 of 64 students are on track 13 students will be targeted for problem-solving and progress monitored weekly/every other week. The K team will review the progress of these students weekly and will review the implementation of the intervention protocol for sufficiency and fidelity.

Your Turn 😊

19 of 67 Students are receiving  
Ds or Fs in 8<sup>th</sup> Grade Pre-Algebra

# Steps in the Problem-Solving Process

## 1. Goal Identification

- Identify replacement behavior
  - \_\_\_\_\_
- Data- current level of performance
  - \_\_\_\_\_
- Data- benchmark (desired) level(s)
  - \_\_\_\_\_
- Data- peer performance
  - \_\_\_\_\_
- Data- GAP analysis
  - \_\_\_\_\_

## 2. Is the instruction effective?

-Are 80% of students being successful (C or higher?)



# Steps in the Problem-Solving Process

## 1. Goal Identification

- Identify replacement behavior
  - Improve performance of 19 students to a C level in 9 weeks
- Data- current level of performance
  - 58 students performing at C level or above
- Data- benchmark (desired) level(s)
  - 67 students performing at C level or above
- Data- peer performance
  - 58 performing at C level or above
- Data- GAP analysis
  - 19 students

## 2. Is the instruction effective?

-Are 80% of students being successful (C or higher?)

58 of 67 = 71% at C level

Instruction is borderline effective (80% is target)

## Mashpee Public Schools—Problem-Solving Protocol

School: \_\_\_\_\_ Grade-Level: \_\_\_\_\_ Date: \_\_\_\_\_  
FOCUS(Group/Student): \_\_\_\_\_ (Parent Notified: When: \_\_\_\_\_ By Whom: \_\_\_\_\_)  
Initiator of this Form: \_\_\_\_\_ Attendees: \_\_\_\_\_

**Step 1: Define the Problem. Identify the Goal (*What is the goal?*)**

**GOAL:**

Identify initial concern (What data raised concerns?)	
What is the desired replacement behavior?	
Using data, what is the current level of performance?	
Using data, what is the benchmark level?	
Using data, what is the peer performance?	
What is the gap?	

# Poll #3

- Select all that apply:
  1. All of the components of Step 1 must be completed to ensure that the target of problem-solving is identified accurately.
  2. Only the “replacement target” is important.
  3. For academic concerns, the “replacement target” should be aligned with grade-level/subject area standards.
  4. Performance of peers is critical to determining who should be the focus of the instruction/intervention.
  5. Using a problem-solving protocol will improve the accuracy of the problem-solving process.

# Steps in the Problem Solving Process

Step 2

Problem Analysis

Hypotheses, Predictions and Assessment

## Step 2 Problem Analysis (*Why is it occurring?*)

- Develop root cause hypotheses
- Using data validate or invalidate hypotheses

# Developing a Hypothesis: Things to Consider

- A hypothesis is an explanation for what the data and your experience tell you.
- Data can only give part of the picture.
- An **accurate hypothesis** is crucial to designing solutions that will be effective.

# Developing a Hypothesis involves...

- **Answering:** Why isn't the goal being attained?
- **Identifying** possible root causes
- **Analyzing** and **validating** supplemental data to support or refute each hypothesis



# Developing a Hypothesis

Developing informed statements about *why* the desired behavior(s) are not occurring.

## **Example:**

The (desired behavior) is not occurring  
because...

**13 K students are below On Watch  
because....**



# Testing Hypotheses using...

## ICEL by RIOT Matrix

# Develop Hypothesis: ICEL

- We must ask questions to form a hypothesis regarding “What is the goal not being attained? Why is the goal not being attained?”
- We ask questions across four domains.



## Problem-Solving using the ICEL/RIOT Matrix

Domain		Variables	Review	Interview	Observe	Test
Instruction	<p>Instruction is how curriculum is taught. How content is presented to students can vary in many different ways:</p> <p>Level of Instruction Rate of Instruction Presentation of Instruction</p> <p>Is the curriculum being differentiated to meet the needs of the learners?</p> <p>Consider:</p> <ul style="list-style-type: none"> <li>instructional techniques</li> <li>presentation style</li> <li>clarity of instruction</li> <li>questioning</li> <li>feedback technique</li> <li>cooperative learning</li> <li>use of graphic organizers</li> <li>instructional conversations</li> <li>development of academic language/ vocabulary</li> </ul>	<p><b>Group/System</b></p> <ul style="list-style-type: none"> <li>Instructional decision making regarding selection and use of materials</li> <li>Use of progress monitoring</li> <li>Explicit Instruction</li> <li>Differentiated Instruction</li> <li>Sequencing of lesson designs to promote success</li> <li>Use of a variety of practice and application activities</li> <li>Pace and presentation of new content</li> <li>Block of time allotted per subject</li> </ul> <p><b>Individual</b></p> <ul style="list-style-type: none"> <li>Instructional decision making regarding placement of the student</li> <li>in groups</li> <li>Use of progress monitoring</li> <li>Communication of expectations and criteria for success</li> <li>Differentiated Instruction</li> <li>Direct instruction with explanations and cues</li> <li>Use of a variety of practice and application activities</li> <li>Pace and presentation of new content</li> </ul>	<ul style="list-style-type: none"> <li>Unit/Lessons Plans</li> <li>Permanent products (e.g. written pieces, worksheets, projects) for skill/degree of difficulty requirements</li> <li>Benchmarks / standards</li> <li>Assignments (calculate % of assign turned in, average amount-% of assignments completed),</li> <li>Length/time required to complete assignments</li> </ul>	<p>Stakeholders about:</p> <ul style="list-style-type: none"> <li>Effective teaching practices</li> <li>Instructional decision making regarding choice of materials, placement of students, instructional strategies</li> <li>Sequencing/pacing of instruction</li> <li>Choice of screening, diagnostic and formative assessments</li> <li>Product methods (e.g. dictation, oral retell, paper pencil, projects)</li> <li>Grouping structures used</li> <li>Accommodations/ modifications used</li> <li>Reinforcement management/ engagement strategies</li> <li>Allowable repetition for mastery/ understanding</li> <li>Who is providing the supplemental/ intensive instruction</li> <li>Use of supportive technology</li> <li>Student/group performance compared to peers</li> <li>Patterns of performance errors/ behavior</li> <li>Setting(s) where behavior is problematic</li> <li>Significance of academic, speech, social, task or motor difficulties</li> <li>Onset and duration of problem</li> <li>Consistency from day to day, subject to subject</li> <li>Interference with personal, interpersonal, and academic adjustment</li> <li>Performance using different modes of expression (e.g. verbal, written, kinesthetic)</li> <li>Teacher perceptions/hypotheses regarding why the student is unable to demonstrate the desired behaviors- academic and/or behavioral</li> <li>Philosophical orientation of curriculum (e.g. whole language, phonics)</li> <li>Expectations of district for pacing/coverage of curriculum</li> </ul>	<ul style="list-style-type: none"> <li>Teachers' instructional styles/preferred styles of presenting</li> <li>Clarity of instructions/ directions</li> <li>Effective teaching practices</li> <li>Communication of benchmarks/expectations and criteria for success</li> <li>How new information is presented</li> <li>Percent of time with direct instruction, whole group instruction, practice time, differentiated instruction, etc.</li> <li>How teachers gain/ maintain student attention</li> <li>Academic engaged time</li> <li>Transitions</li> <li>Large group instruction</li> <li>Small group instruction</li> <li>Independent work time</li> <li>Group work time</li> <li>Teachers use of positive reinforcement, student-teacher interaction quality/quantity, (use of direct observation protocols)</li> <li>Time on task</li> <li>External supports necessary to sustain engagement</li> </ul>	<p>Classroom environment survey</p> <p>Develop checklists on effective instruction</p> <p>"Things to Look For" and "Ask About"</p>

**E**

The schedule does not provide time/opportunity for practice and instruction necessary to “catch up”.

**I**

The instructional strategies do not emphasize multisensory approaches that students lacking in readiness need to accelerate rate of learning.

**E**

Exposure and instructional support at home is not at the level necessary to support school-based literacy instruction

**C**

Pacing is too fast for students who come to K without the readiness for literacy development

# Key Domains of Learning

<b>I</b>	Instruction	Instruction is <u>how</u> the curriculum is taught.
<b>C</b>	Curriculum	Curriculum refers to <u>what</u> is taught.
<b>E</b>	Environment	The environment is <u>where</u> the instruction takes place.
<b>L</b>	Learner	The learner is <u>who</u> is being taught.



# ICEL Sort

Instruction	Curriculum	Environment	Learner
<p>Instruction is how curriculum is taught.</p> <p>How content is presented to students can vary in many different ways:</p> <ul style="list-style-type: none"> <li>• Level of Instruction</li> <li>• Rate of Instruction</li> <li>• Presentation of Instruction</li> </ul> <p>Is the curriculum being differentiated to meet the needs of the learners?</p> <p>Consider:</p> <ul style="list-style-type: none"> <li>• instructional techniques</li> <li>• presentation style</li> <li>• questioning</li> <li>• feedback technique</li> <li>• cooperative learning</li> <li>• use of graphic organizers</li> <li>• instructional conversations</li> <li>• development of academic language/ vocabulary</li> </ul>	<p>Curriculum refers to what is taught.</p> <p>Scope and sequence would be included here as well as pacing within and between topics.</p> <p>Is curriculum appropriate for student?</p> <p>Consider:</p> <ul style="list-style-type: none"> <li>• sequencing of objectives</li> <li>• teaching methods</li> <li>• materials provided</li> <li>• difficulty</li> <li>• presentation</li> <li>• length</li> <li>• format</li> <li>• relevance</li> </ul>	<p>The environment includes the classroom/school, family/community, and peers.</p> <p>How is the environment impacting learning?</p> <p>Consider:</p> <ul style="list-style-type: none"> <li>• what may distract or inhibit student learning</li> <li>• peers</li> <li>• home/family support</li> <li>• expectations</li> <li>• beliefs/attitudes</li> <li>• transience</li> <li>• attendance/tardies</li> <li>• class size</li> </ul>	<p>The learner is who is being taught.</p> <p>This is the last domain that is considered and is only addressed when the curriculum and instruction are found to be appropriate and the environment is accommodating.</p> <p>Variables include motivation, attendance, prerequisite skills, organization/study habits, abilities, impairments, and history of instruction.</p>

Your Turn:

## Developing Hypotheses

The desired behavior is not occurring because...

**13 students are Off Track in  
literacy because....**



# ElementarySchool

## Hypothesis

The problem is occurring because \_\_\_\_\_ .

**Brainstorm  
hypotheses and  
write on stickies**

Students  
to com  
cs co  
rcer  
grade students.

track in  
The  
resulted  
failures fo





# Elementary School

## Hypothesis

The problem is occurring because \_\_\_\_\_ .

Pacing of the Curriculum is too Fast for students  
Lacking readiness

Home exposure and support is insufficient

Multisensory instruction is needed.

Additional practice opportunities are needed

Lack of exposure to text and meaning of ext

Preteaching of material is needed to to back of background

Your Turn 😊

# Your Task

- INDIVIDUALLY, Develop ONE hypothesis in ONE area of I-C-E-L
- Identify the area (I C E L) and your hypothesis. Share in the Chat Box

# Step 2-Problem Analysis

## Hypothesis #1

### Step 2: Problem Analysis (*Why is it occurring?*)

Generate multiple hypotheses addressing what you think is at the root of the identified issue.

Hypothesis sentence frame: *The problem is occurring because \_\_\_\_\_.*

<b>HYPOTHESIS 1</b>	<i>13 students are off track because they are not receiving multisensory instruction to increase fluency in phonemic awareness and sound/symbol association</i>
<b>Prediction If, then...</b>	<i>When students receive a multi-sensory approach to instruction, then their fluency in SS association and initial blending will improve.</i>

# Step 2-Problem Analysis

## Hypothesis #

<b>HYPOTHESIS 2</b>	<i>13 students are off track because they are not receiving enough instruction in SS association and blending.</i>
<b>Prediction</b> <b>If, then...</b>	<i>When students receive additional instruction time in both traditional and multisensory instruction, then the gap between the two instructional methods will lessen.</i>

# Test and Validate Hypotheses

<b>R</b>	Review	Review of historical records and products
	and/or	
<b>I</b>	Interview	Interviews of key stakeholders
	and/or	
<b>O</b>	Observe	Observe performance in real time functional settings
	and/or	
<b>T</b>	Test	Test through careful use of appropriately matched measurement strategies/methods

# Assessment Information

## RIOT-Hypothesis 1

### Step 2: Problem Analysis (Why is it occurring?)

Generate multiple hypotheses addressing what you think is at the root of the identified issue.

Hypothesis sentence frame: *The problem is occurring because \_\_\_\_\_.*

<b>HYPOTHESIS 1</b>	<i>13 students are off track because they are not receiving multisensory instruction to increase fluency in phonemic awareness and sound/symbol association</i>
<b>Prediction</b> If, then...	<i>When students receive a multi-sensory approach to instruction, then their fluency in SS association and initial blending will improve.</i>
<b>Relevant Data</b> R I O T	Test-Assessment of sound symbol association and initial blending skills using multisensory instruction for ½ of the letters and traditional instruction with the remaining ½ of the letters.. Observe- Automaticity of response.

# Assessment Information

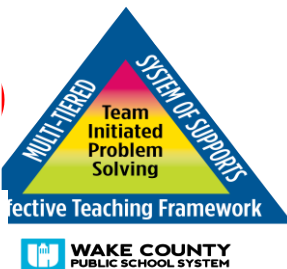
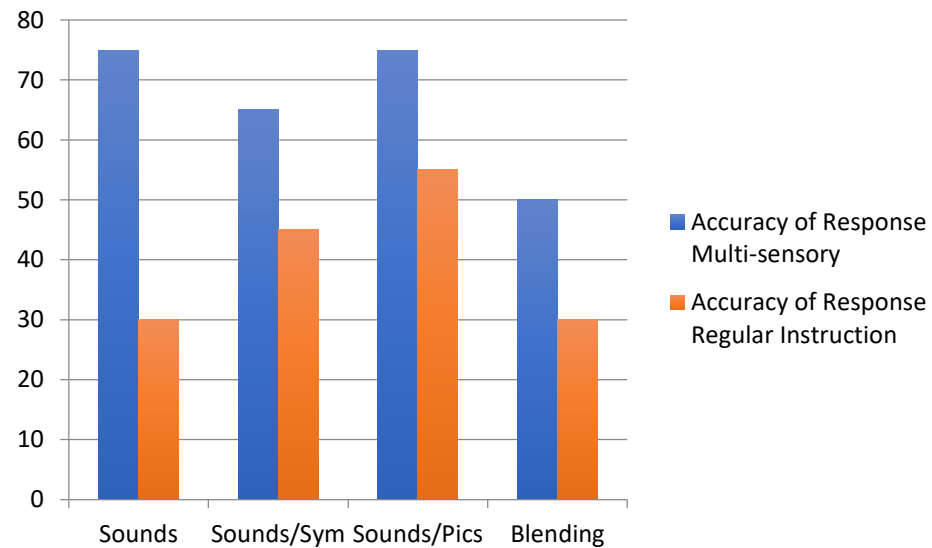
## RIOT-Hypothesis 1

<b>HYPOTHESIS 1</b>	<i>13 students are off track because they are not receiving multisensory instruction to increase fluency in phonemic awareness and sound/symbol association</i>
<b>Prediction If, then...</b>	<i>When students receive a multi-sensory approach to instruction, then their fluency in SS association and initial blending will improve.</i>
<b>Relevant Data R I O T</b>	Test-Assessment of sound symbol association and initial blending skills using multisensory instruction for ½ of the letters and traditional instruction with the remaining ½ of the letters.. Observe- Automaticity of response.
<b>Validated? Yes/No</b>	YES. Direct assessment of letter sounds, sound symbol association and initial blending skills indicated 100% accuracy for letter names, 65% accuracy for sounds, 40% accuracy for sound/symbol/pictures and 20% accuracy for blending. A multisensory approach was used with ½ of the inaccurate sound symbol associations and regular instruction was used with the remaining sounds. Accuracy of responses following multisensory instruction was 50% higher than responses following regular instruction.



# + Elementary School

Test: Early Literacy Assessments- TYPE of instruction



# Assessment Information

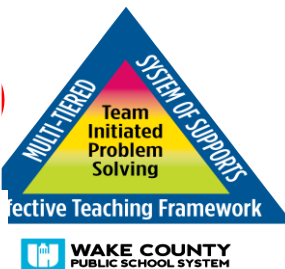
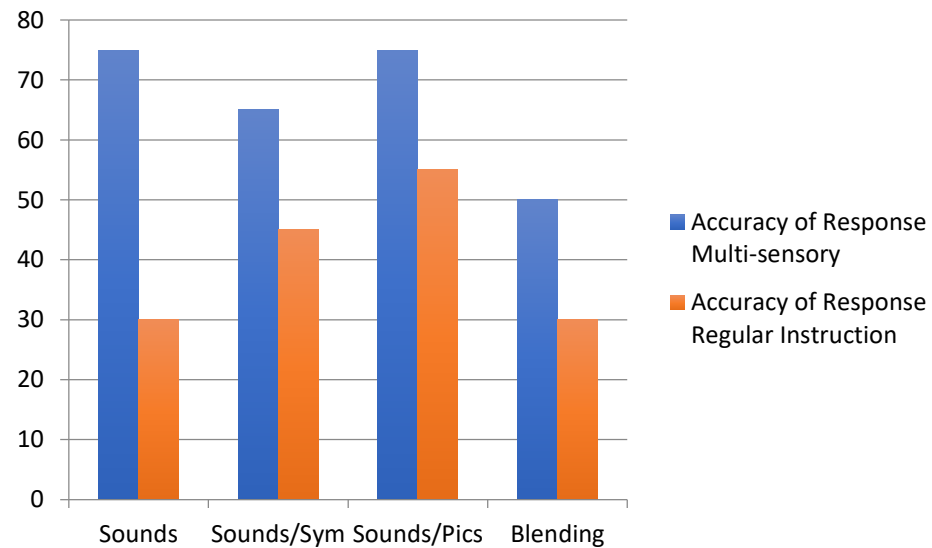
## RIOT-Hypothesis 2

<b>HYPOTHESIS 2</b>	<i>13 students are off track because they are not receiving enough instruction in SS association and blending.</i>
<b>Prediction</b> If, then...	<i>When students receive additional instruction time in both traditional and multisensory instruction, then the gap between the two instructional methods will lessen.</i>
Relevant Data R I O T	Same as hypothesis #1 but with additional instructional time.
Validated? <i>Yes/No</i>	NO. The performance gap between the 2 methods did not decrease. It is the TYPE of instruction not the AMOUNT that makes the difference.



# Elementary School

Test: Early Literacy Assessments- Amount of instruction  
50% additional time



## ICEL by RIOT: Validating/Invalidating Hypothesis

- Hypothesis 1: **Validated**

***13 students are off track because they need multisensory instruction to increase fluency in phonemic awareness and sound/symbol association***

What type of intervention does this validated hypothesis suggest?

# Intervention Development

# Interventions

- **WHAT** will be done?
  - *Multisensory approach to instruction (e.g., Orton-Gillingham) focused on SS association and initial blending. Pacing of instruction will use a pre-teach, review, re-teach format for letter/sound introduction.*
- **WHO** will do it?
  - *Kindergarten teacher and paraprofessional*
- **WHEN** will it be implemented and for how long?
  - *30 minutes each day in groups of 4 students in 15 minute sessions*
- **WHAT** data will be collected to monitor intervention on student performance
  - *Data will be collected on Friday of each week assessing both letters and sounds that were the focus of instruction as well as those that were not the focus of instruction.*
- **HOW** often will the data be reviewed?
  - *Data will be reviewed weekly.*

# MUST Consider

- Teacher and student “acceptability”
  - Is this acceptable to the teacher?
  - Is this something that the student will engage because it is relevant and meaningful?
- Can we implement this instruction/intervention in sufficient amount?
- Is this intervention within the skill set of the teacher?
- How do we provide intervention support?

# Intervention Plan

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**Description of Intervention & Expected Outcomes****Tier: 1****2****3**

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**Implementation**

Frequency (How often):

Amount of Time (Duration):

When:

Who:

**Support**

Who:

How Often:

Description/Type:

---

**Data Collection**

Type:

Frequency:

Review Dates:

Expected Performance on Review Dates:

Responsible Party:

---



# Intervention Support

- Intervention plans should be developed based on student need and skills of staff
- All intervention plans should have intervention support
- Principals should ensure that intervention plans have intervention support
- Teachers should not be expected to implement plans for which there is no support

# Intervention Support Meeting Activities

- Review student performance data
- Identify barriers to successful implementation of the instruction/intervention
  - Problem-solve barriers
- Review critical components of the instruction/intervention

# Intervention Support

- Pre-meeting
  - Review data
  - Review steps to intervention
  - Determine logistics
- First 2 weeks
  - 2-3 meetings/week
  - Review data
  - Review steps to intervention
  - Revise, if necessary

# Intervention Support

- Following weeks
  - Meet at least weekly
  - Review data
  - Review steps
  - Discuss Revisions
- Approaching benchmark
  - Review data
  - Schedule for intervention fading
  - Review data

### Intervention Documentation Worksheet

Week of

Teacher: \_\_\_\_\_

[illegible]

### Legend

<p>T = Time (# of minutes)</p> <p>P = Program</p> <p>F = Focus</p>	<p><b>Focus</b></p> <p>L = Language</p> <p>PA = Phonemic Awareness</p> <p>P = Phonics</p> <p>F = Fluency</p> <p>V = Vocabulary</p> <p>C = Comprehension</p> <p>MC = Math Computations</p> <p>MA = Math Applications</p> <p>B = Behavior</p>	<p><b>Programming</b></p> <p>(Create your own key. For example, W = Wilson Foundations, SST = Social Skills Training, CCC = Cover/Copy/Compare)</p> <p>_____ = _____</p> <p>_____ = _____</p> <p>_____ = _____</p> <p>_____ = _____</p> <p>_____ = _____</p>
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# Poll #4

- Check all that apply:
- Intervention support is provided to teachers to ensure fidelity and sufficiency of instruction-
  1. Routinely for all instruction/interventions developed through a problem-solving process.
  2. Sometimes, but only for very difficult instruction/interventions
  3. Seldom—if a teacher requests support.
  4. Never

# Step 4

Response to Instruction

# Decision Rules: What is a “Good” Response to Intervention?

- ***Positive Response***

- Gap is closing
- Can extrapolate point at which target student(s) will “come in range” of target--even if this is long range
- Level of “risk” lowers over time

- ***Questionable Response***

- Rate at which gap is widening slows considerably, but gap is still widening
- Gap stops widening but closure does not occur

- ***Poor Response***

- Gap continues to widen with no change in rate



# Decision Rules: Linking Rtl to Intervention Decisions

- Positive
  - Continue intervention with current goal
  - Continue intervention with goal increased
  - Fade intervention to determine if student(s) have acquired functional independence

# Decision Rules: Linking Rtl to Intervention Decisions

- Questionable
  - Was intervention implemented as intended?
    - If no - employ strategies to increase implementation integrity
    - If yes -
      - Increase intensity of current intervention for a short period of time and assess impact.
      - If rate improves, continue. If rate does not improve, return to problem solving

# Decision Rules: Linking Rtl to Intervention Decisions

- Poor
  - Was intervention implemented as intended?
    - If no - employ strategies in increase implementation integrity
    - If yes -
      - Is intervention aligned with the verified hypothesis? (Intervention Design)
      - Are there other hypotheses to consider? (Problem Analysis)
      - Was the problem identified correctly? (Problem Identification)

**Review/Evaluation of Progress (Date: \_\_\_\_\_)**

**Data:**

**Is the Response to Instruction/Intervention:**                      1. Positive                      2. Questionable                      3. Poor

**1. If Response to Instruction/Intervention is *POSITIVE*:**

A) Continue current instructional supports                      B) Adjust goal upward                      C) Fade supports

Comments/Actions:

**2. If Response to Instruction/Intervention is *QUESTIONABLE*:**

Was the intervention/instruction implemented as planned?                      YES                      NO

a. If **NO**—What strategies will be utilized to increase implementation?

b. If **YES**—Should intervention intensity be increased?                      YES                      NO

Comments/Actions:

**3. If Response to Instruction/Intervention is *POOR*:**

Was the intervention/instruction implemented as planned?                      YES                      NO

a. If **NO**—What strategies will be utilized to increase implementation?

b. If **YES**—Was instruction/intervention aligned with the verified hypothesis, or is there other aligned instruction/intervention to consider?

c. Are there other hypotheses to consider?

d. Was the problem identified correctly?

Comments/Actions:

Schedule  
SLBT  
Meeting ☐  
Date: \_\_\_\_\_