

Efficient Use of Data to Determine Appropriate Early Literacy Interventions

MNREA 1:30-2:45

KATHY PATTON

MINNESOTA CENTER FOR READING RESEARCH

UNIVERSITY OF MINNESOTA



PRESS

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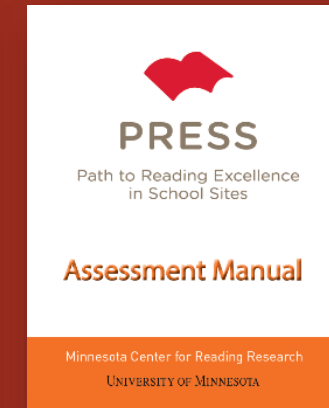
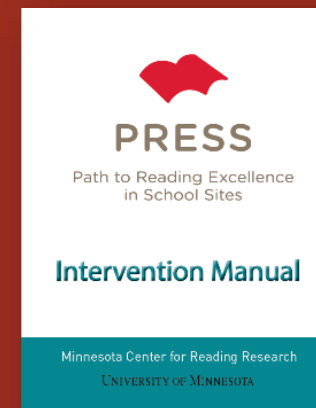
The beginnings of PRESS . . .

Implemented and refined
by faculty and staff at the



Currently . . .

Provide intervention and
assessment resources



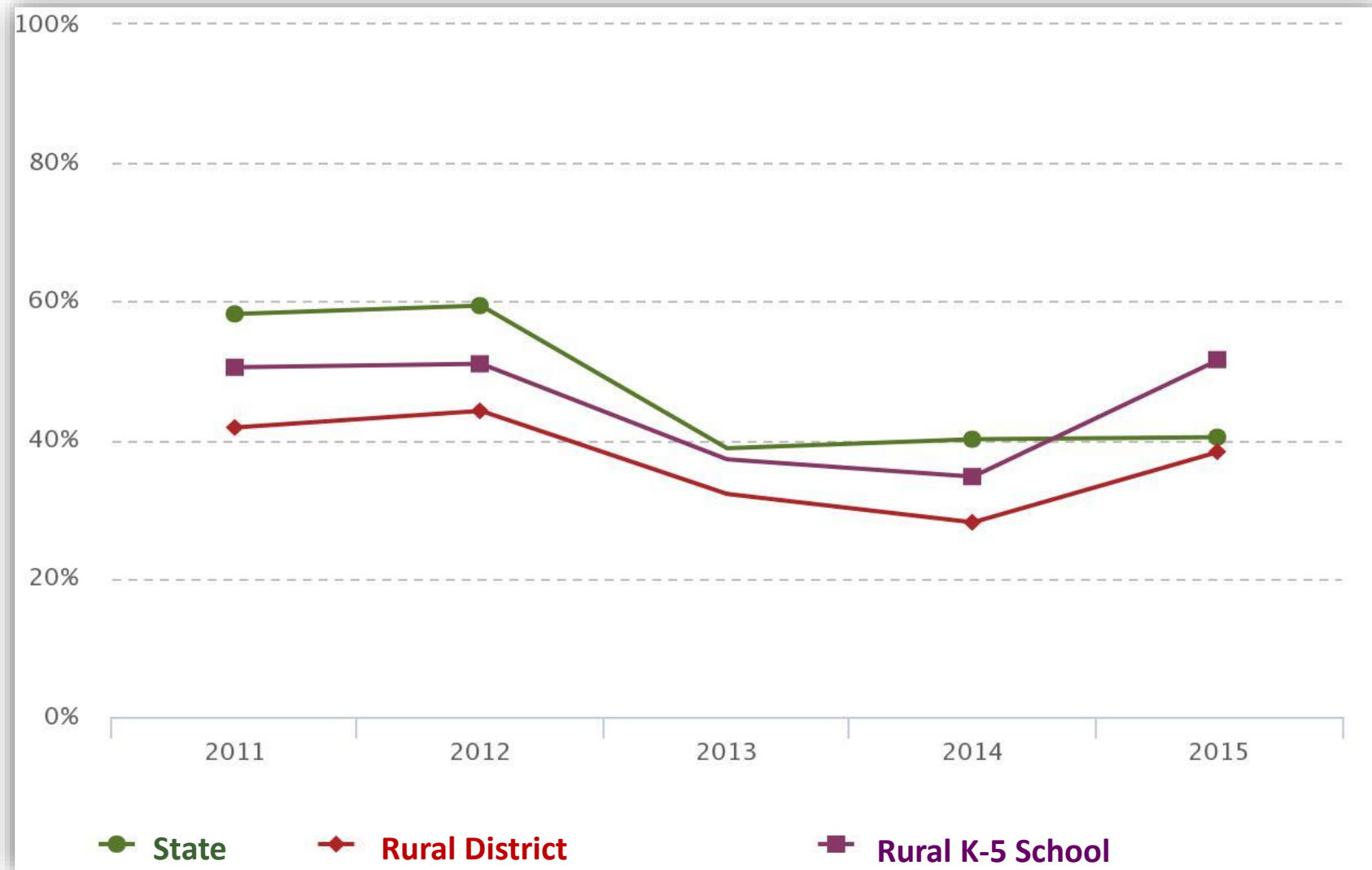
Getting To Know You

Intervention Teacher?
Academic Coach?
Administrator?
Classroom Teacher?
Other?

Outcomes for the Session

Attendees will:

- ☐ become familiar with the research supporting explicit, systematic, and targeted reading interventions.
- ☐ explore decision-making tools and data samples to identify student needs.
- ☐ learn strategic steps to choose appropriate early literacy interventions.



I see...

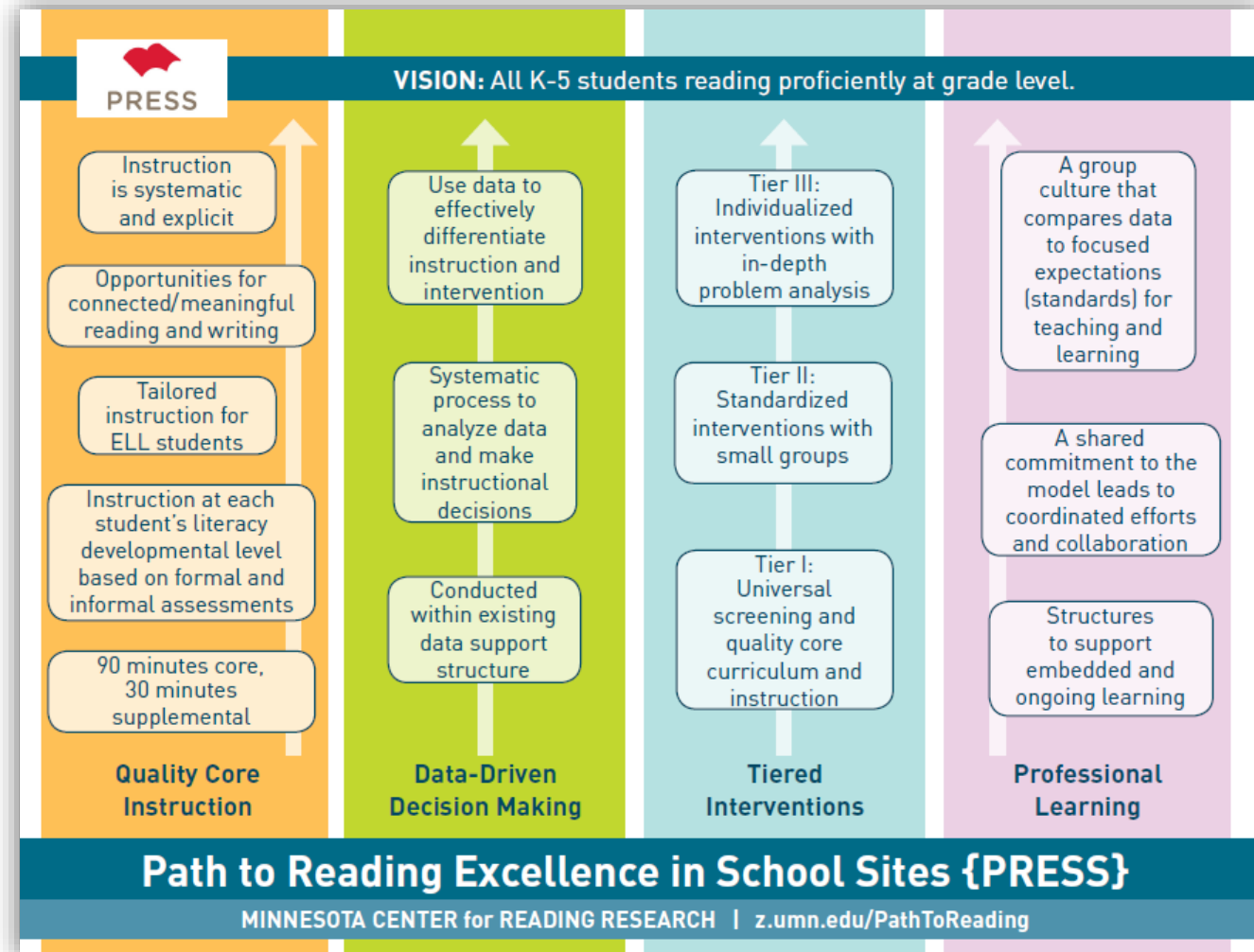
I think...

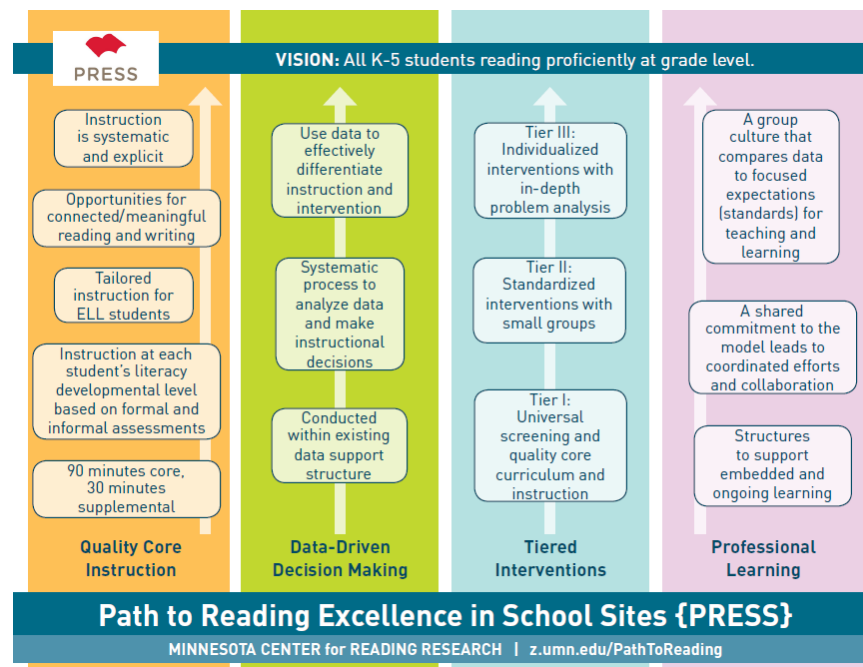
I wonder...

Response to Intervention: Guiding Principles from the International Literacy Association

Systemic and Comprehensive Approaches

RTI must be part of a **comprehensive, systemic approach** to language and literacy assessment and instruction that supports all preK–12 students and teachers.





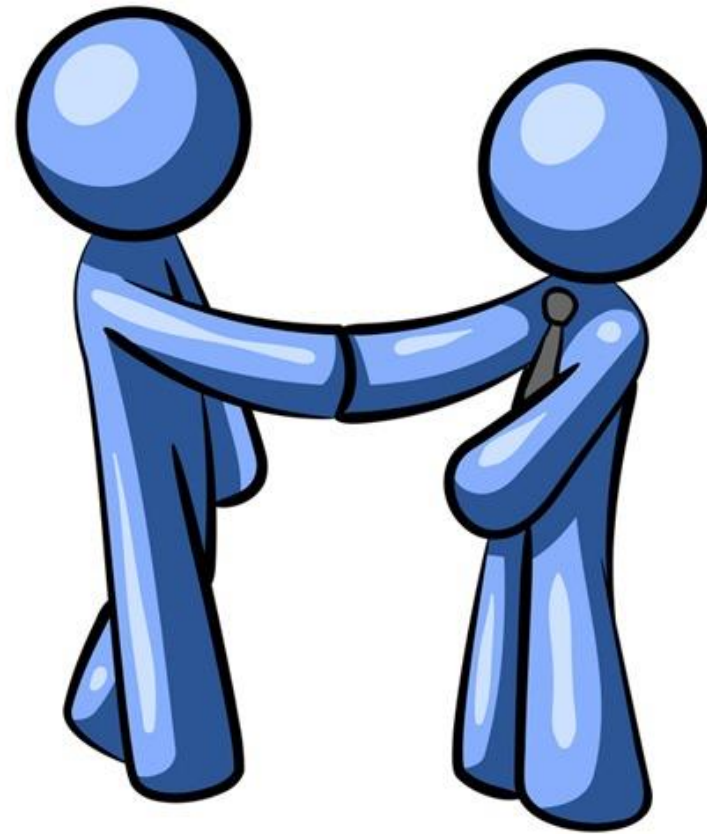
PRESS is a comprehensive system of tiered supports and data driven decision making driven by research-based approaches to literacy. It includes ongoing embedded professional development to support school professionals in their efforts to have their students meet reading proficiency standards.

RTI → Multi Tiered Systems of Support - MTSS

The systematic use of assessment data to most efficiently allocate resources in order to teach all students.

Burns & VanDerHeyden, 2006

What are you currently
using to determine
interventions?



[Image retrieved www.garden4us.com](http://www.garden4us.com)

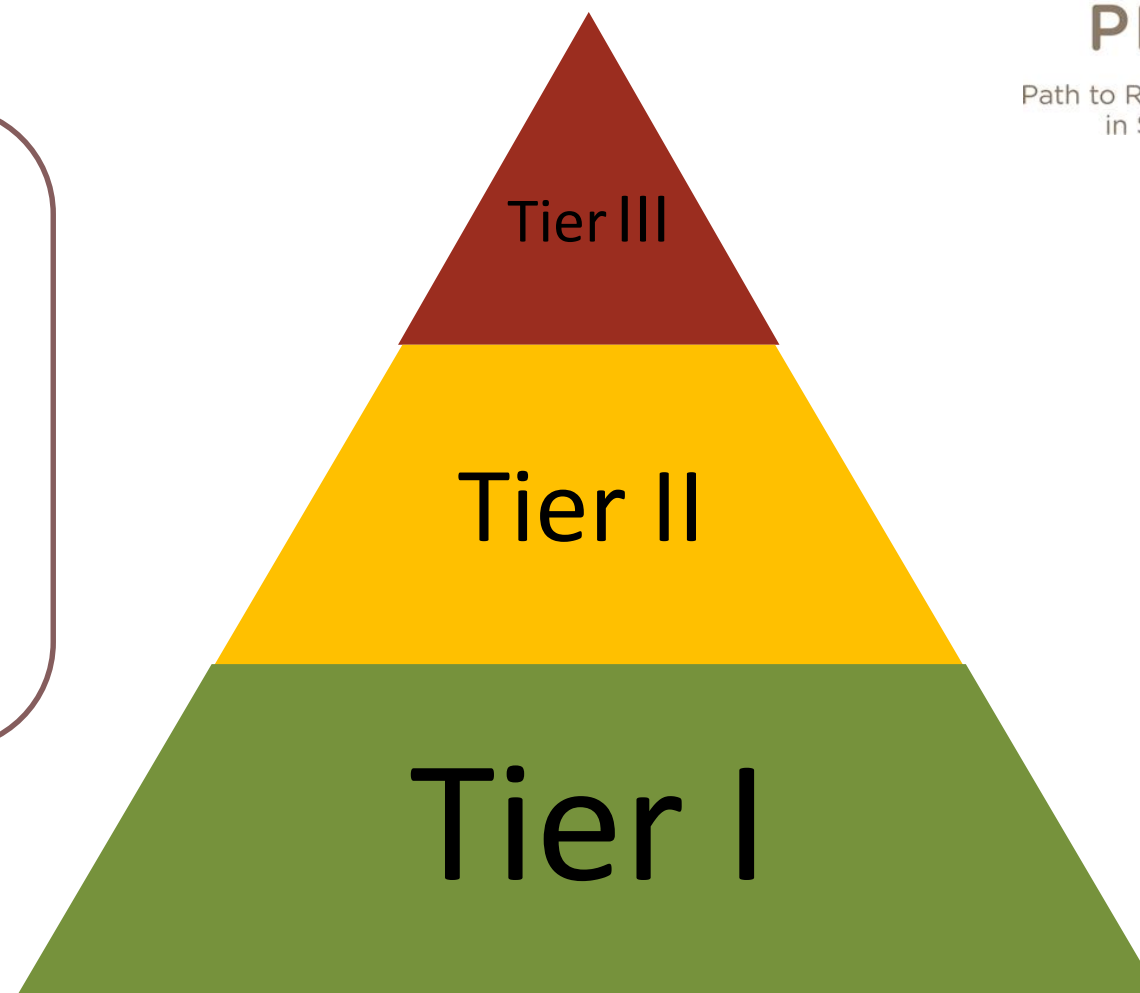


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Problem analysis is
central to the RTI
process and should
occur at all three tiers
(Christ, Burns, & Ysseldyke, 2005).

Evidence Base



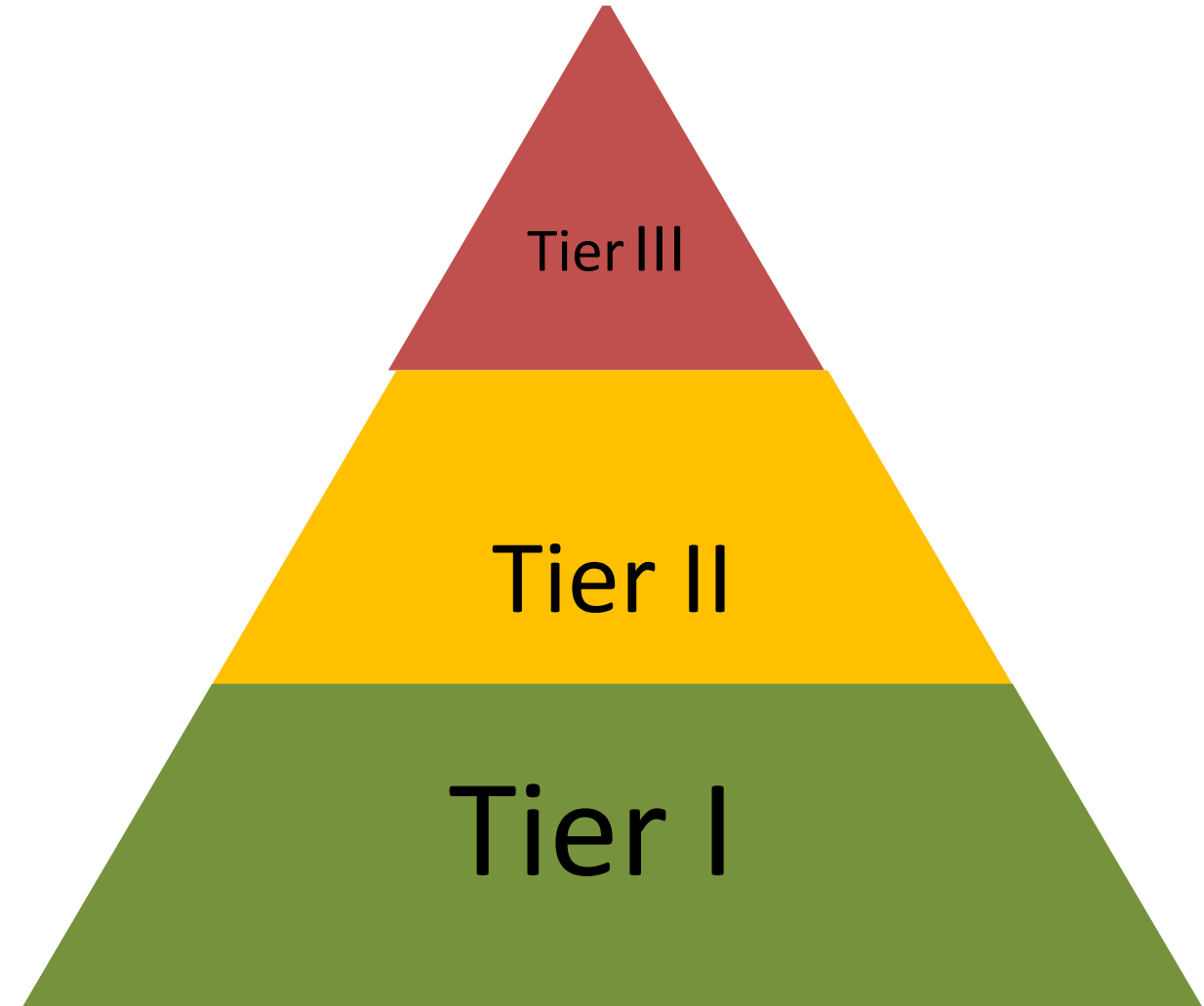
Our Problem Solving Process

➤ Begin with:

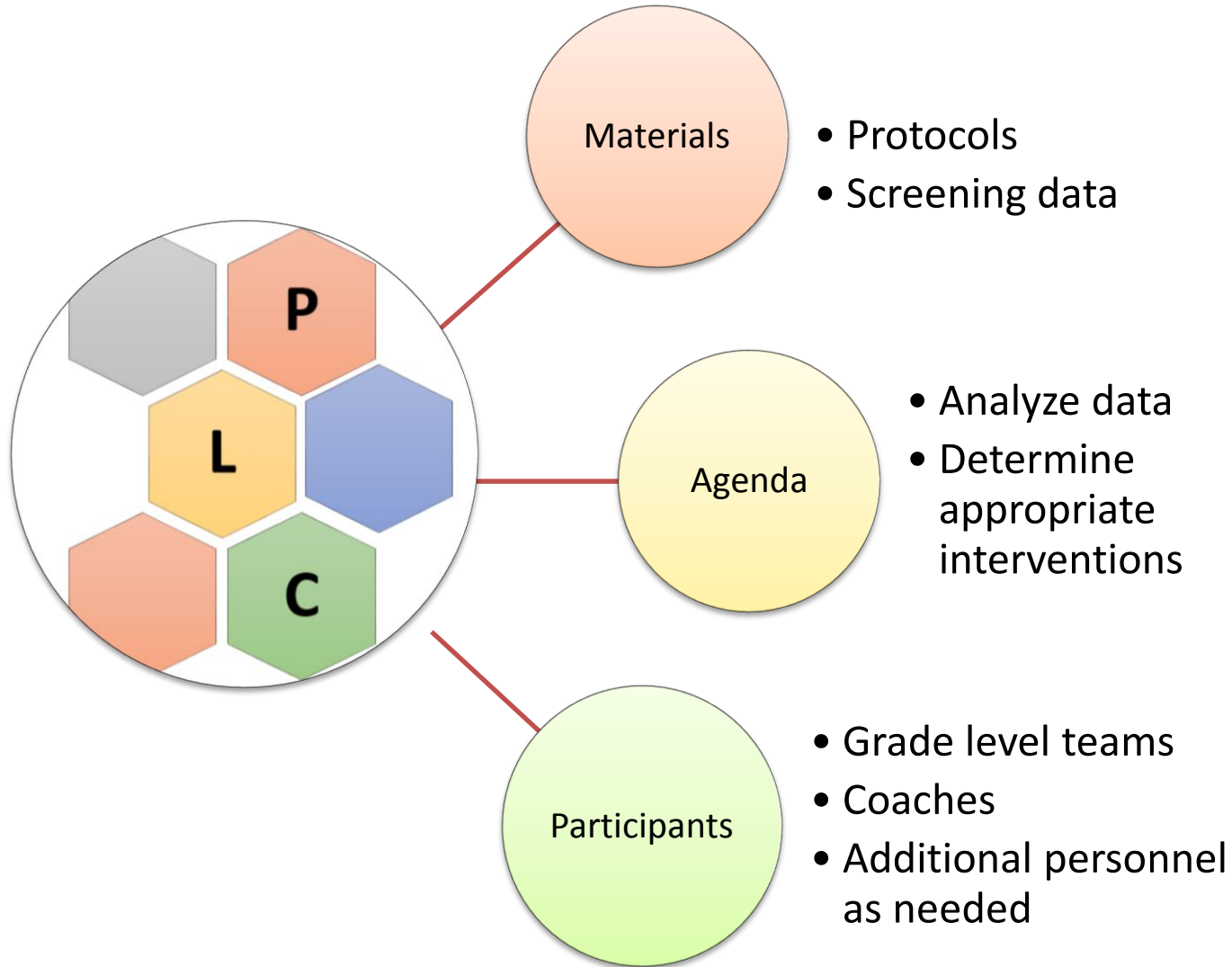
Tier I – Is it a class-wide problem?

Tier II – What is the category of the problem for individual students?

Tier III – What is the causal variable for an individual student?



How do we problem solve?



Data to Determine Interventions

Type of Assessment	What?	When?	Who?	Examples
Screening				
Diagnostic				

a.
Students below
benchmark

b.
Using data to determine
who needs help.

c.
All Students

d.
Quick Phonemic Awareness Assessment
Decoding Inventory
Oral Reading Fluency
Measures of Academic Progress (MAP)

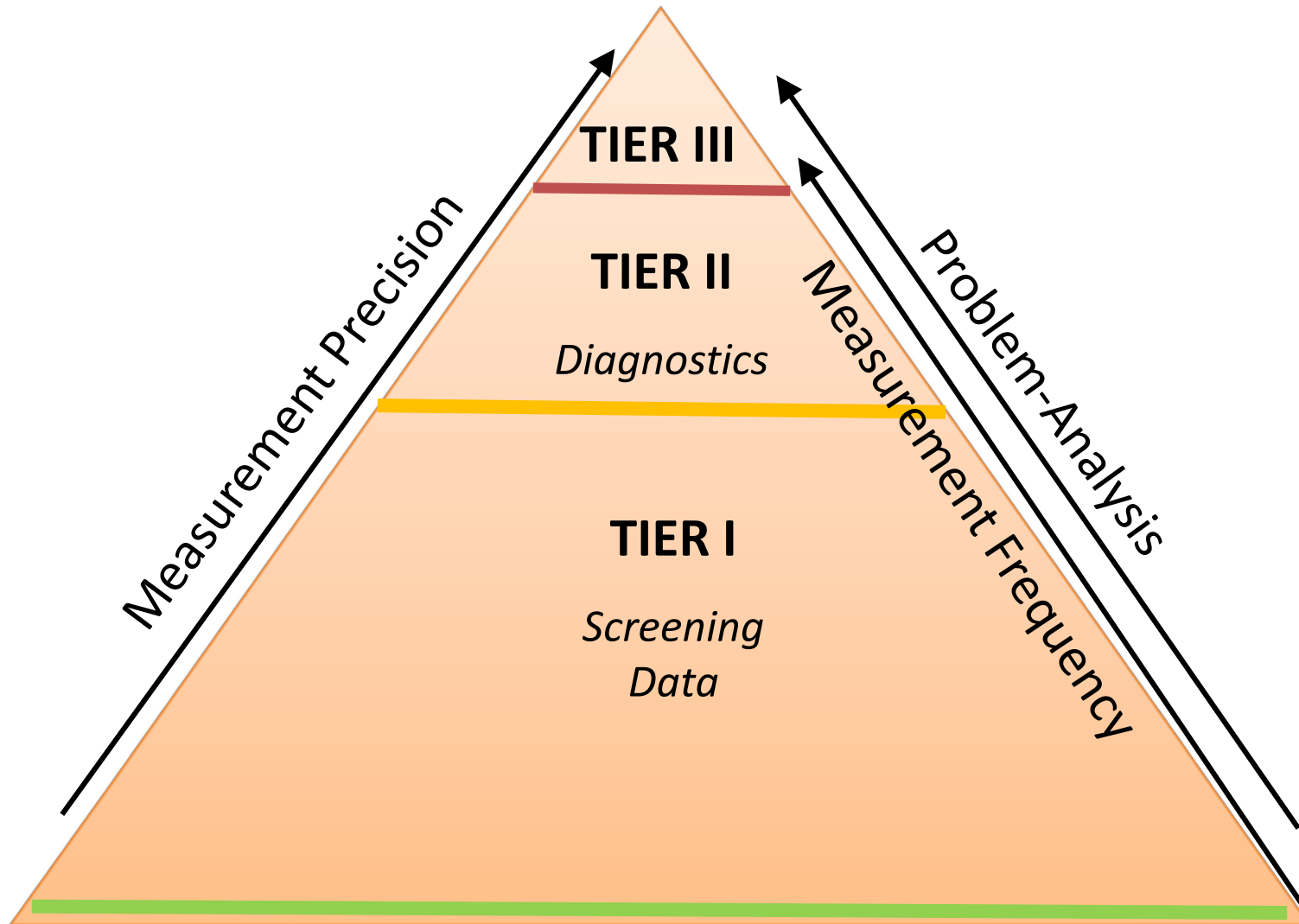
e.
Whenever a
student is
identified as
needing help.

f.
Letter Sound Fluency
Nonsense Word Fluency
Oral Reading Fluency
STAR Reading
NWEA/MAP

g.
Usually three times
per year.

h.
Using data to determine what
intervention an individual
student needs.

MTSS and Problem-Solving



Screening Resources



aimsweb



DIBELS[®] Next



Response to Intervention made easy

Screening Measures

Kindergarten

- Letter Sound Fluency (LSF)
- Initial Sound Fluency (ISF)

First Grade

- Nonsense Word Fluency (NWF)
- Oral Reading Fluency (ORF)

2nd– 5th Grades

- Oral Reading Fluency (ORF)
- Comprehension (MAP, aReading)

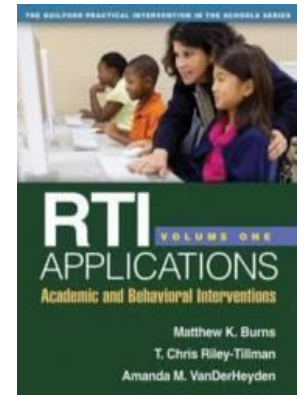
With screening data, schools can answer questions such as:

Is instruction working for most students in the school?

Are particular groups of students at-risk, relative to their classmates?

- If so, do the groups share common features?

Burns, M. K., Riley-Tillman, T. C., & VanDerHeyden, A. M. (2012). *RTI applications: Academic and behavioral interventions* (Vol. 1). Guilford Press.



Analysis to Action

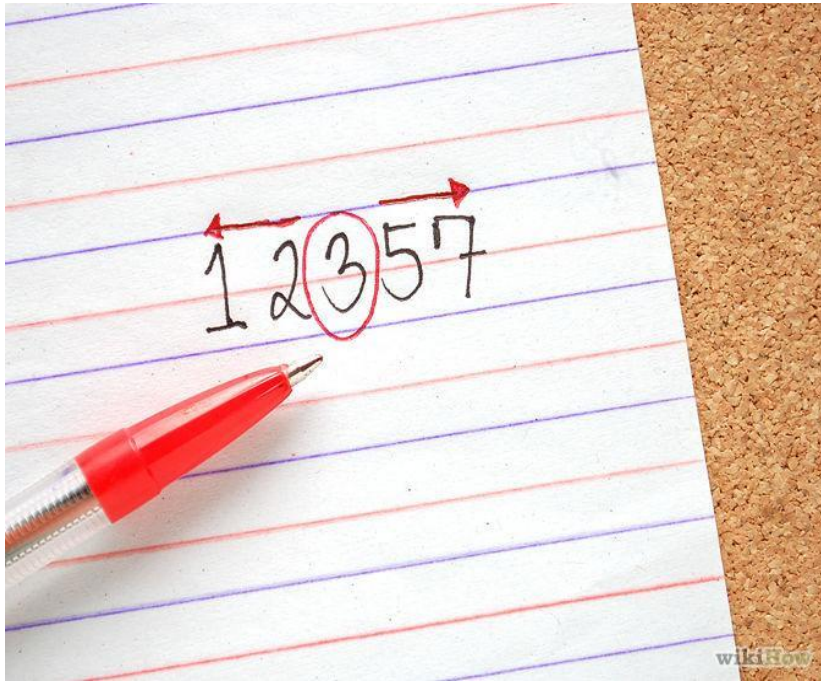
Benchmark Data Worksheet

Benchmark Criterion FALL: _____ WINTER: _____ SPRING: _____

Meeting Date: _____ Teacher Name: _____ Assessment Analyzed: _____ Class-wide Median: _____

Determine Need:				Action Items:	
Is a Class-wide Intervention necessary? Yes No <div style="position: relative; height: 100px; margin-top: 20px;"> If yes → If no ↓ </div>				<ul style="list-style-type: none"> Determine appropriate Class-wide Intervention: _____ Determine Start Date: _____ Determine End Date: _____ Schedule Fidelity Check: _____ Progress Monitor Assessment 	
Which students fall within the at-risk range? Are there any students we missed?				Among students identified as needing a Tier 2 intervention, what is the category of the problem? (phonemic awareness, decoding, fluency, vocabulary, comprehension)	What intervention do you plan to use to address the problem?
Student Name:	Fluency	Accuracy	Comp		
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

Where does the process begin. . .



Find the class median

\geq Target Score $<$

Compare Median to Target

What is the Class Median?

	Spring Benchmark		65
Student	Grade	ORF	Errors
		WRC	
A	2	64	5
B	2	22	5
C	2	77	0
D	2	68	4
E	2	21	1
F	2	18	2
G	2	60	0
H	2	70	2
I	2	84	0
J	2	77	0
K	2	26	4
L	2	89	1
M	2	54	0
N	2	46	8
O	2	70	3
P	2	75	0
Q	2	32	6
R	2	35	2
S	2	51	1
T	2	71	1
Class Median			

	Spring Benchmark		65
Student	Grade	ORF	Errors
		WRC	
F	2	18	2
E	2	21	1
B	2	22	5
K	2	26	4
Q	2	32	6
R	2	35	2
N	2	46	8
S	2	51	1
M	2	54	0
G	2	60	0
A	2	64	5
D	2	68	4
H	2	70	2
O	2	70	3
T	2	71	1
P	2	75	0
C	2	77	0
J	2	77	0
I	2	84	0
L	2	89	1
Class Median			

Analysis to Action

Benchmark Data Worksheet

Benchmark Criterion FALL: _____ WINTER: _____ SPRING: **65**

Meeting Date: **May** Teacher Name: **Ms. 2nd** Assessment Analyzed: **ORF** Class-wide Median: **62**

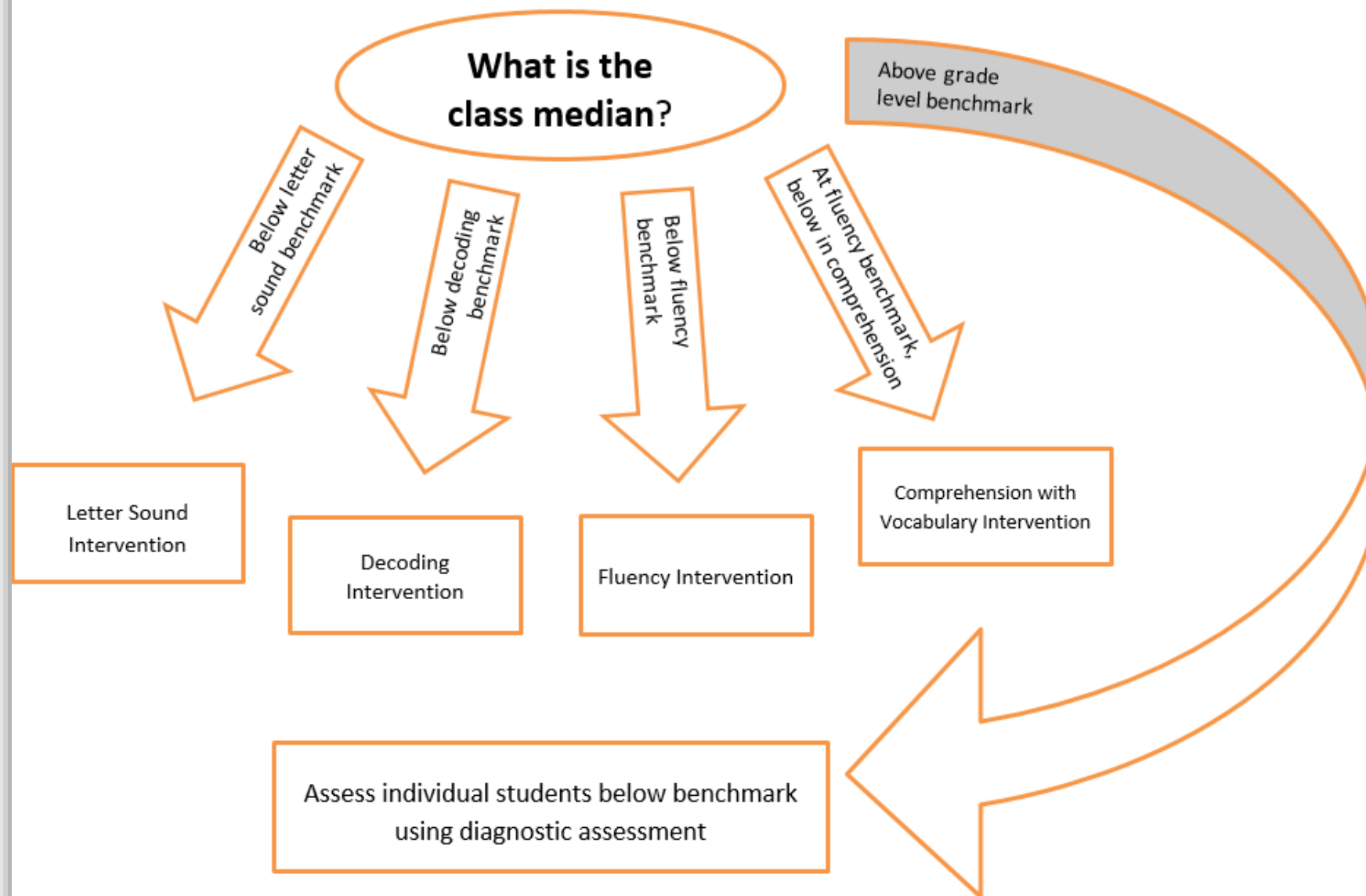
Determine Need:				Action Items:	
Is a Class-wide Intervention necessary? <input checked="" type="radio"/> Yes <input type="radio"/> No <div style="text-align: center;"> If yes → If no ↓ </div>				<ul style="list-style-type: none"> Determine appropriate Class-wide Intervention: _____ Determine Start Date: _____ Determine End Date: _____ Schedule Fidelity Check: _____ Progress Monitor Assessment _____ 	
Which students fall within the at-risk range? Are there any students we missed?				Among students identified as needing a Tier 2 intervention, what is the category of the problem? (phonemic awareness, decoding, fluency, vocabulary, comprehension)	What intervention do you plan to use to address the problem?
Student Name:	Fluency	Accuracy	Comp		
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					



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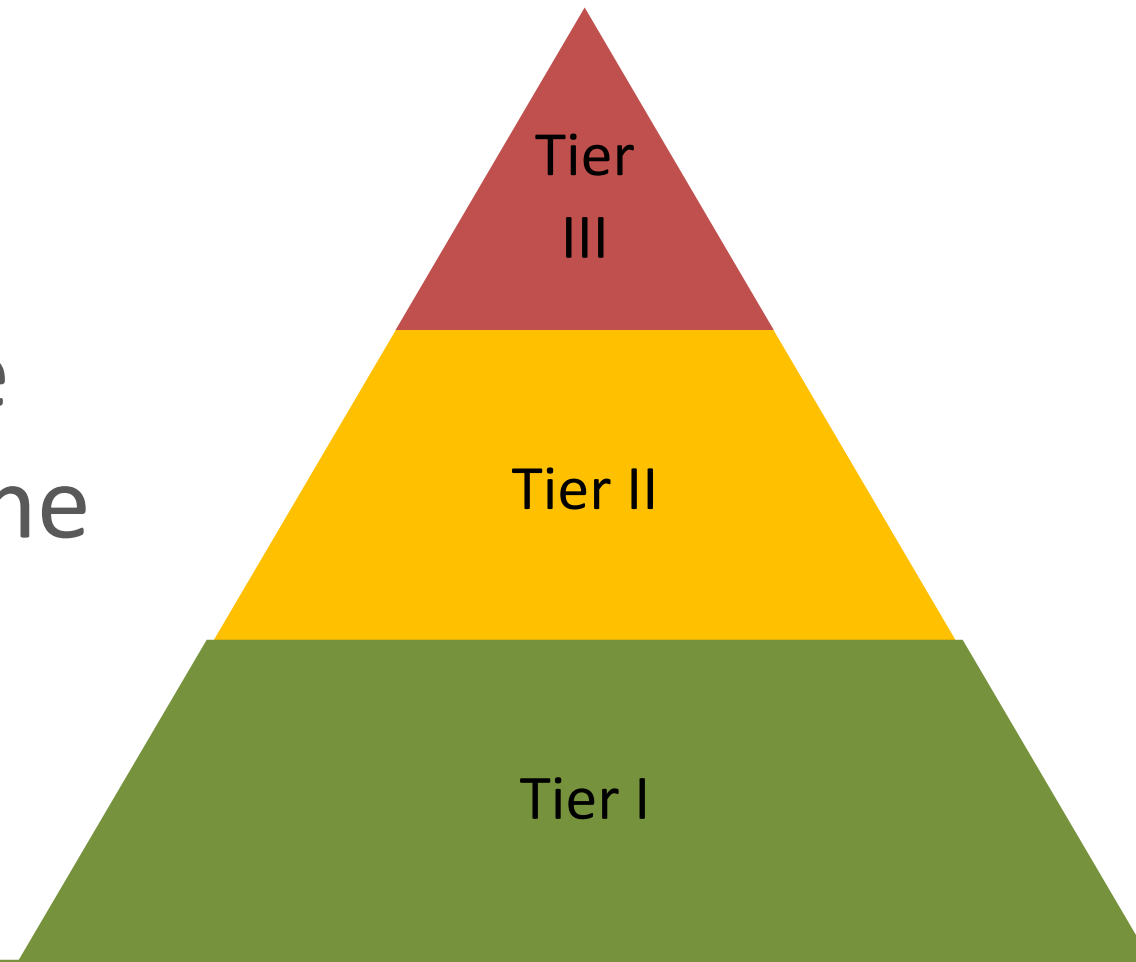
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Classwide Intervention Flow Chart



Tier 2

What is the
category of the
problem?



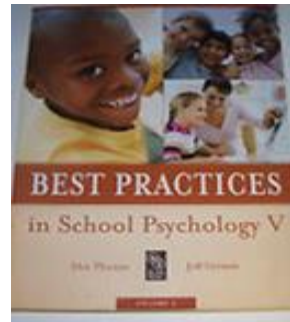
Targeted interventions are identified so that the intervention is **directly linked to the problem** and therefore has a high likelihood of being successful.

(Tilly, 2008)

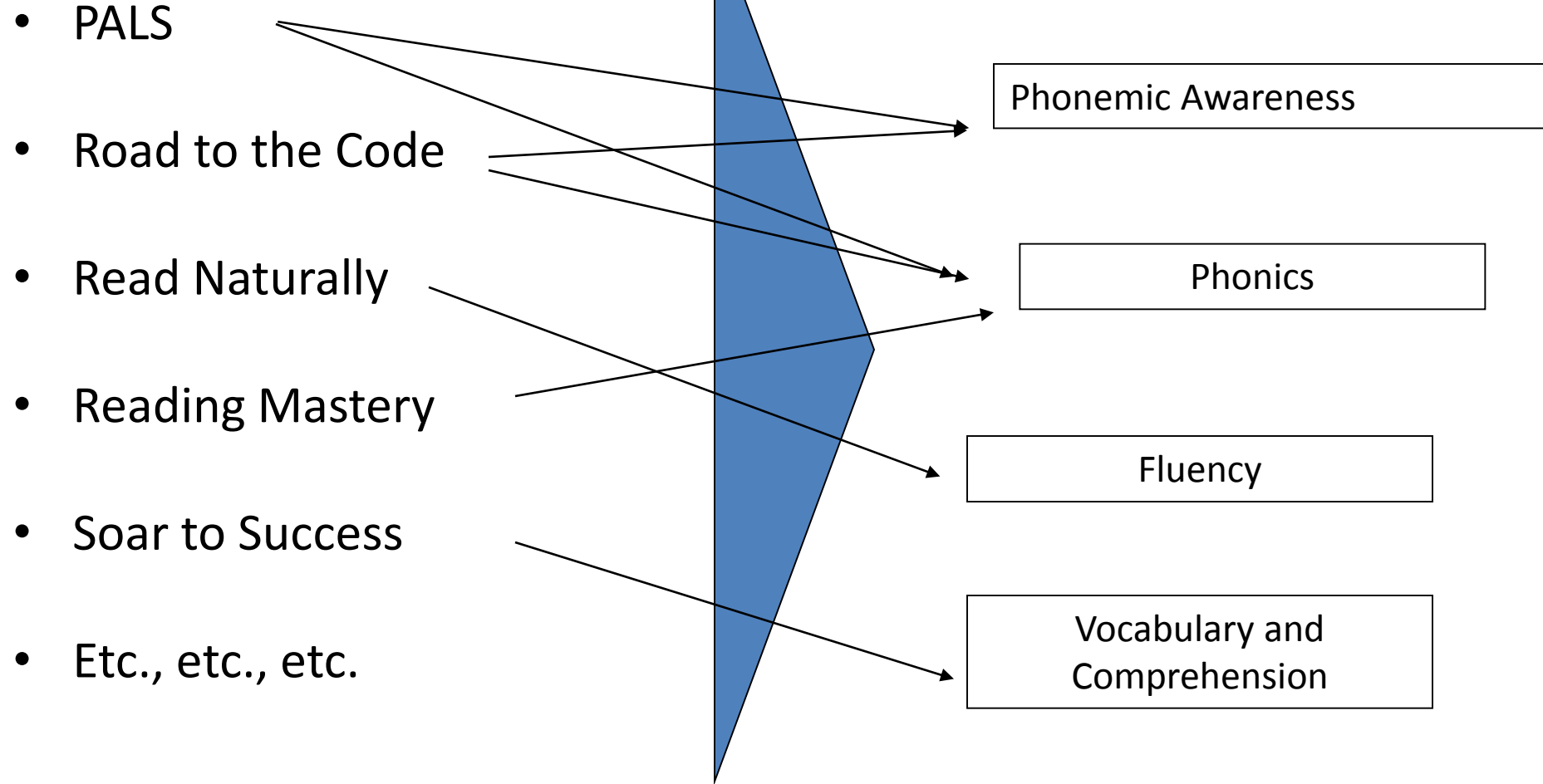
What makes an intervention effective?

- ❖ Correctly targeted
- ❖ Explicit instruction
- ❖ Appropriate challenge
- ❖ Opportunities to respond
- ❖ Immediate feedback
 - With contingent reinforcers

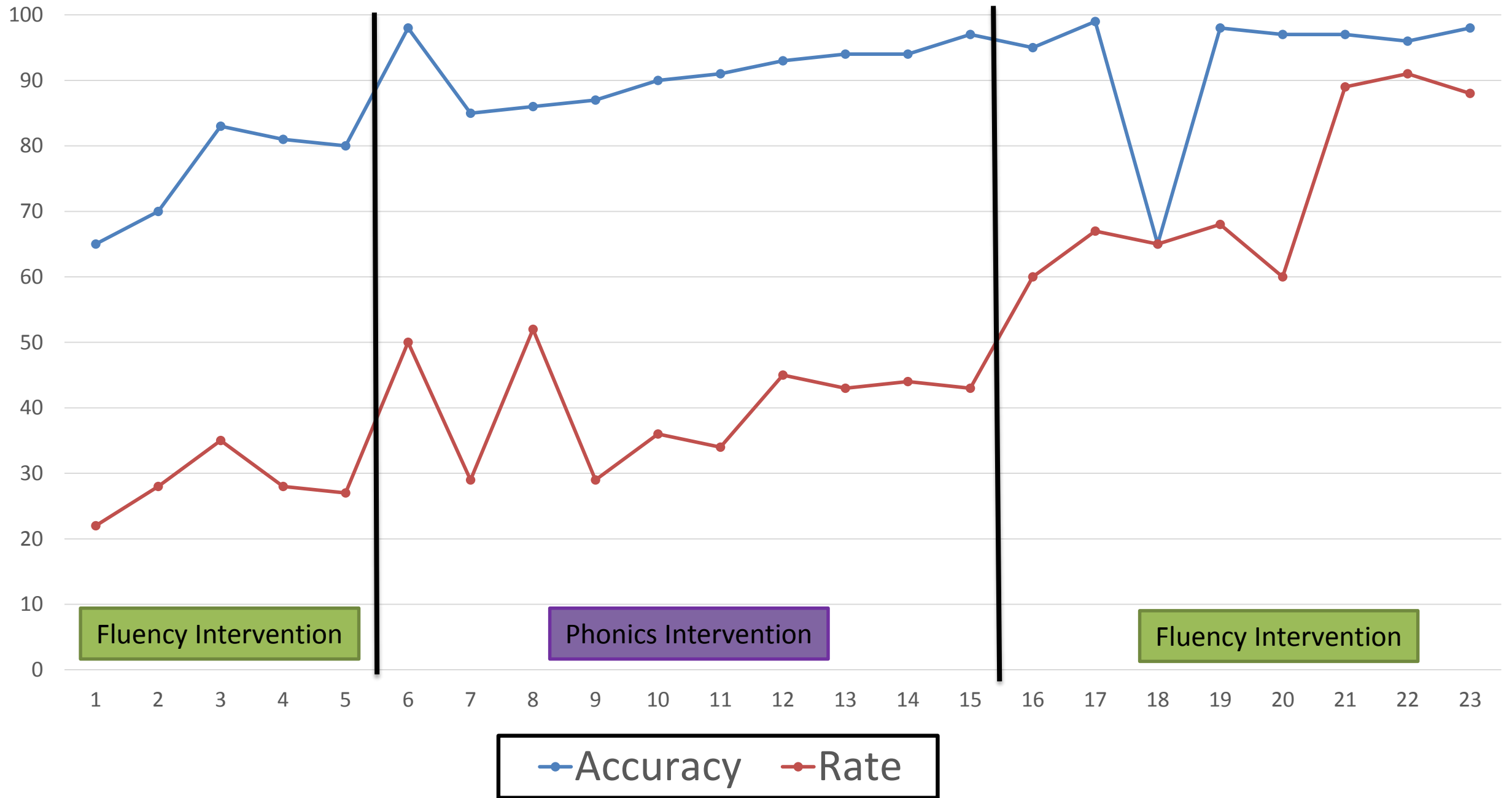
Burns, VanDerHeyden, & Boice (2008). Best practices in implementing individual interventions. In A. Thomas & J. Grimes (Eds.) *Best practices in school psychology* (5th ed.). Bethesda, MD: National Association of School Psychologists.



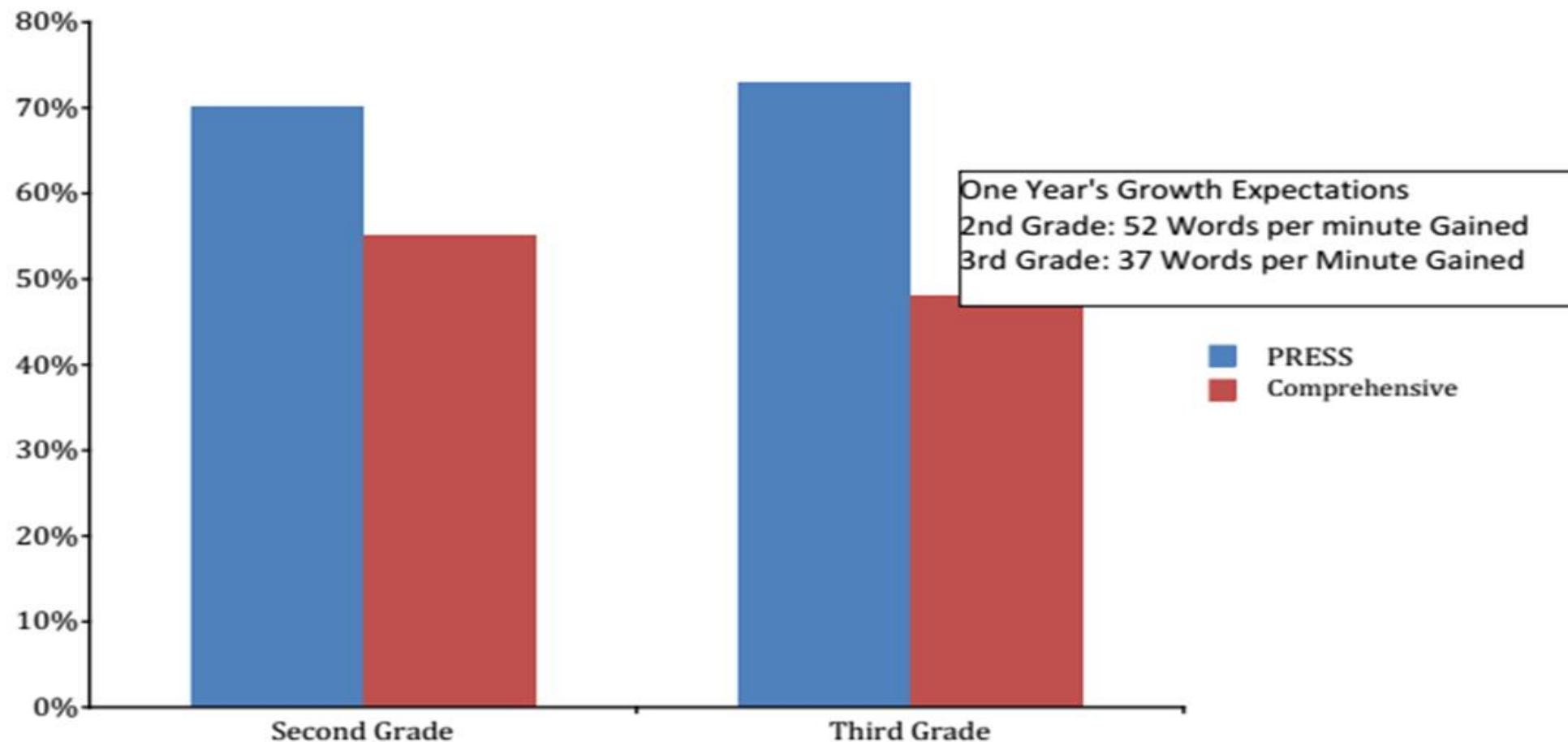
Tier II Interventions



Why should I find the category of the problem?

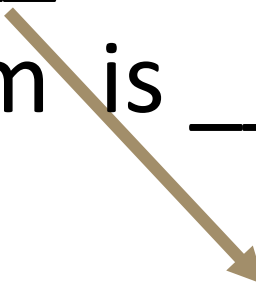


Tier 2 Intervention Data



PRESS Year 2 (2012-2013) data showing percentage of second- and third-grade students making one year's growth on Oral Reading Fluency (ORF) measure and/or Measures of Academic Progress for Reading (MAP).

The most important thing
to _____ about determining the category of
the problem is _____.



understand
ponder
remember
follow up on
ask, etc...

Phonemic Awareness



Phonics



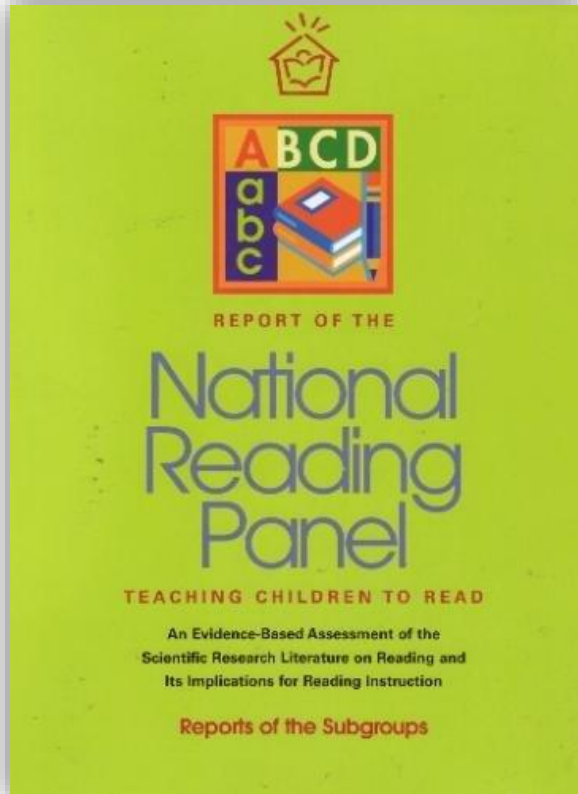
Fluency

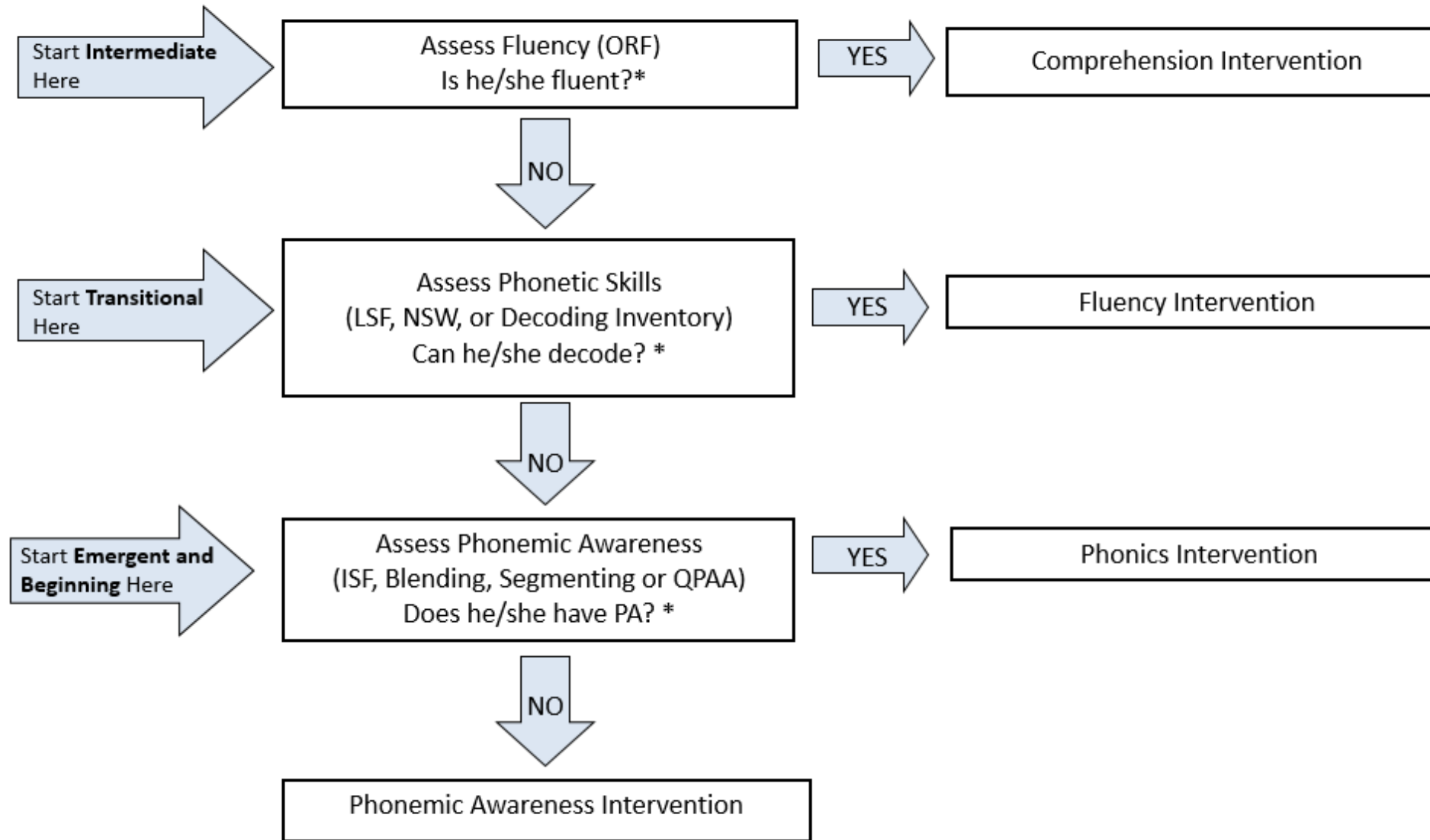


Vocabulary



Comprehension





**Assess vocabulary when appropriate and add vocabulary component to intervention*

Analysis to Action

Benchmark Data Worksheet

Benchmark Criterion FALL: _____ WINTER: 91 SPRING: _____

Meeting Date: Jan Teacher Name: Mr. 3rd Assessment Analyzed: ORF Class-wide Median: 92

Determine Need:				Action Items:	
Is a Class-wide Intervention necessary? Yes <input type="radio"/> No <input checked="" type="radio"/>				<ul style="list-style-type: none"> Determine appropriate Class-wide Intervention: _____ Determine Start Date: _____ Determine End Date: _____ Schedule Fidelity Check: _____ Progress Monitor Assessment: _____ 	
Which students fall within the at-risk range? Are there any students we missed?				Among students identified as needing a Tier 2 intervention, what is the category of the problem? (phonemic awareness, decoding, fluency, vocabulary, comprehension)	
Student Name:	Fluency	Accuracy	Comp		
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Accuracy Matters



(One) reason that students might not perform a task sufficiently is that they lack prerequisite skills for completing the task. This difficulty is often referred to as a skill deficit.

Hosp, J. L., & Ardoyn, S. P. (2008). Assessment for instructional planning. *Assessment for Effective Intervention*, 33(2), 69-77.

Evidence Base

Kindergarten Students

LOW ACCURACY
*Check Phonemic
Awareness*

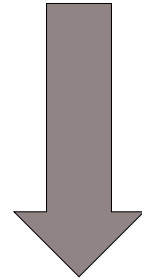
Student	Grade	Fall LSF	Errors	Accuracy	Skill to address
J	K	9	3	78%	PA and/or Letter Sounds
M	K	7	0	100%	Letter Sounds
C	K	5	10	33%	PA and/or Letter Sounds
R	K	1	9	10%	PA and/or Letter Sounds



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Screening:
Is there a problem?



Diagnostic:
What is the problem?

Using data and/or a Diagnostic Assessment
to determine

“What is the category of the problem?”

Phoneme:

Isolation

Blending

Segmenting

Manipulating

Quick Phonemic Awareness Assessment

Student: _____ Date: _____ Administered by: _____

Initial Sound

Use bird as an example. Say to the student, "I'm going to say a word and then I will say the beginning sound, which is the first sound in a word. For example, in the word *bird*, the beginning sound is /b/. Now you try (using the same word, *bird*)."

If the student answers incorrectly, then provide a second example using the word *hut*. If the student still cannot identify the beginning sound, then discontinue the assessment. If the student responds correctly, then praise the child and continue by asking him or her to provide the beginning sound for the following words:

Word	cat	top	pet	sun	mop
response					
correct					

≤ 4 consider PA 1

>4 move to Segmenting

Segmenting:

Use pen as an example. Say to the student "I'm going to say a word. Please tell me how many sounds you hear in the word, then tell me which sounds you hear. For example, if I say the word *pen* I hear 3 sounds - /p/ /e/ /n/. How many sounds do you hear? Which sounds?" Then ask the student to segment a second word. If the student does not answer correctly, model the correct response and ask him or her to segment a third word. If the student still does not respond correctly, discontinue the assessment. If the student responds correctly, praise the student and continue segmenting the following words.

Word	fan	set	bin	dot	nut
# of sounds					
segmented sounds					
both responses correct					

≤ 4 consider PA 3

>4 move to Blending



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Quick Phonemic Awareness Assessment



Why work on Phonemic Awareness?

PA skills are among the best predictors of reading after two years of formal schooling, and difficulties with PA are strongly linked to reading difficulties (Burns, 2003; Snow, Burns, & Griffin, 1998).

How many sounds are in
the word dog?

What word does
/c/ /a/ /t/ make?

First Grade Students

LOW ACCURACY
Check Letter
Sounds

Student	Grade	Fall NWF	Errors	Accuracy	Skill to address
D	1	30	2	94%	Decoding
J	1	28	1	97%	Decoding
Z	1	8	8	50%	Letter Sounds
H	1	0	0	0%	Letter Sounds

Why work on Phonics?

Phonics skills are **critical for developing word recognition** and reading fluency. (Snow & Juel, 2005)

Explicit, systematic phonics instruction is necessary for most students (Shankweiler & Fowler, 2004), and it seems to work equally well with minority children (Jeynes, 2008).

letters

words

2nd Grade Students

ACCURACY
≥ 93% Fluency Intervention
< 93% Decoding Intervention

Student	Grade	Spring ORF	Errors	Accuracy	Skill
D	2 nd	75	5	94%	Fluency
J	2 nd	72	3	96%	Fluency
C	2 nd	69	1	99%	Fluency
I	2 nd	63	7	90%	Decoding
Z	2 nd	42	4	91%	Decoding
R	2 nd	41	9	82%	Decoding

Analysis to Action

Benchmark Data Worksheet

Benchmark Criterion FALL: _____ WINTER: _____ SPRING: 65

Meeting Date: May Teacher Name: MS. A Assessment Analyzed: ORF Class wide Median: 66

Determine Need:				Action Items:	
<p>Is a Class-wide Intervention necessary?</p> <p>Yes <input type="radio"/> No <input checked="" type="radio"/></p> <div style="text-align: center; margin-top: 20px;"> <p>If yes </p> <p>If no </p> </div>				<ul style="list-style-type: none"> Determine appropriate Class-wide Intervention: _____ Determine Start Date: _____ Determine End Date: _____ Schedule Fidelity Check: _____ Progress Monitor Assessment _____ 	
Which students fall within the at-risk range? Are there any students we missed?				Among students identified as needing a Tier 2 intervention, what is the category of the problem? (phonemic awareness, decoding, fluency, vocabulary, comprehension)	What intervention do you plan to use to address the problem?
Student Name:	Fluency	Accuracy	Comp		
1. <i>Student F</i>	39/11	78%	below	<i>decoding</i>	Administer a decoding diagnostic assessment
2. <i>Student E</i>	44/9	83%	below	<i>decoding</i>	
3. <i>Student B</i>	48/5	91%	below	<i>decoding</i>	
4. <i>Student K</i>	50/6	89%	below	<i>decoding</i>	
5. <i>Student Q</i>	54/4	93%	below	<i>fluency</i>	
6. <i>Student R</i>	58/3	95%	below	<i>fluency</i>	
7. <i>Student N</i>	59/4	94%	below	<i>fluency</i>	
8.					
9.					

Decoding Inventory

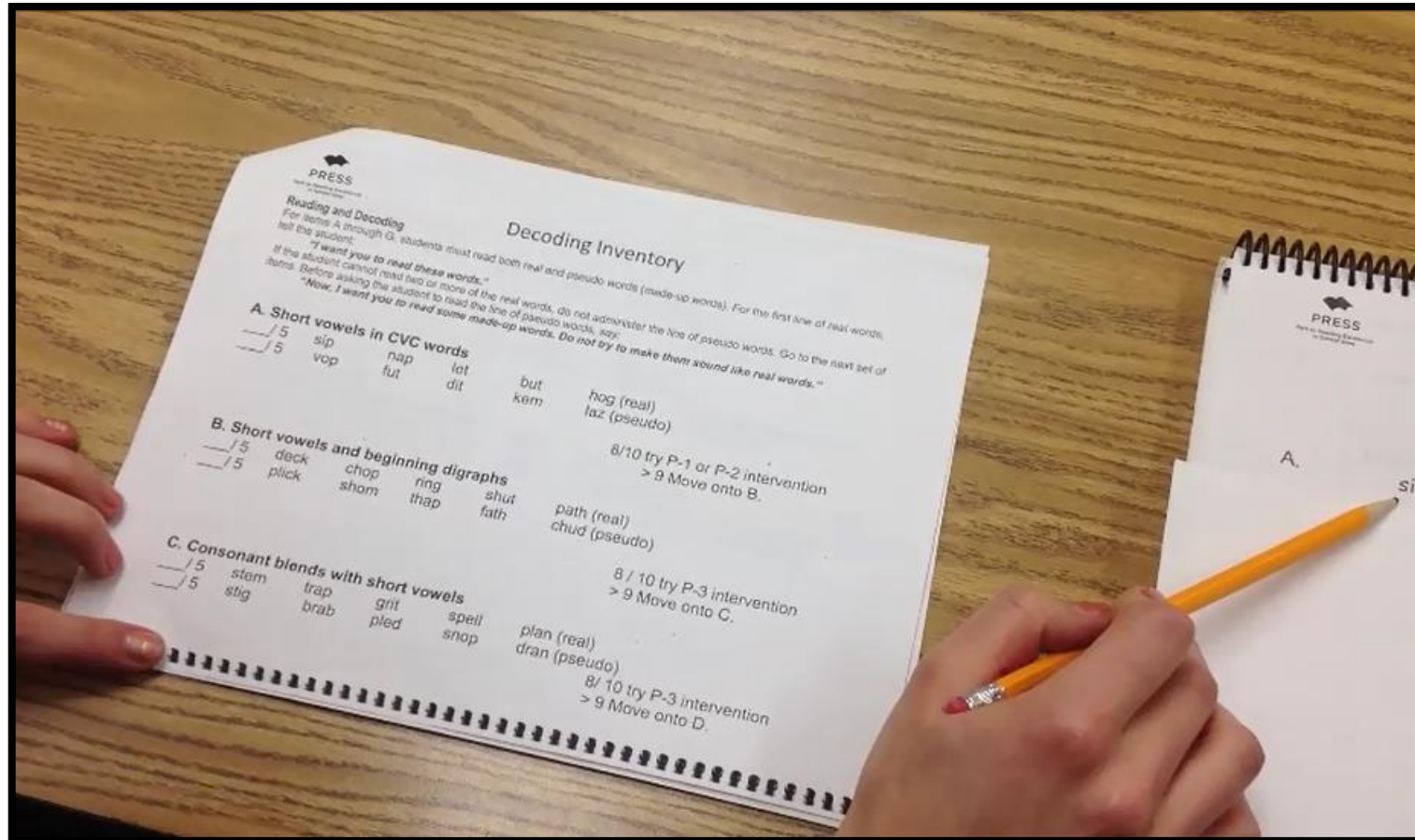
Student: _____ Teacher: _____ School: _____

Date: _____ Evaluator: _____

Begin with Letter/Sound Correspondence to determine where to begin a decoding intervention:

Skill Assessment	Student Score	Intervention Recommendation
Letter Sound Correspondence		≤ 21 use P-1 or assess phonemic awareness > 21 Assess vowel sounds and decoding
Low Frequency Decodable Words		
A. Short vowels in CVC words		≤ 8 try P-3 intervention ≥ 9 Move on to B
B. Digraphs with short vowels		≤ 8 try P-3 intervention ≥ 9 Move on to C
C. Consonant blends with short vowels		≤ 8 try P-4 intervention ≥ 9 Move on to D
D. Vowel Spellings: silent e and vowel teams		≤ 8 try P-5 intervention ≥ 9 Move on to E
E. Variant vowels and diphthongs		≤ 8 try P-5 intervention ≥ 9 Move on to Fluency

Decoding Inventory:



Analysis to Action

Benchmark Data Worksheet

Benchmark Criterion FALL: _____ WINTER: _____ SPRING: 65

Meeting Date: May Teacher Name: MS. A Assessment Analyzed: ORF Class wide Median: 66

Determine Need:				Action Items:	
<p>Is a Class-wide Intervention necessary?</p> <p>Yes No</p> <div style="text-align: center; margin-top: 20px;"> <p>If yes </p> <p>If no </p> </div>				<ul style="list-style-type: none"> Determine appropriate Class-wide Intervention: _____ Determine Start Date: _____ Determine End Date: _____ Schedule Fidelity Check: _____ Progress Monitor Assessment _____ 	
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Student Name:	Fluency	Accuracy	Comp		
1. <i>Student F</i>	<i>39/11</i>	<i>78%</i>	<i>below</i>	<i>decoding</i>	
2. <i>Student E</i>	<i>44/9</i>	<i>83%</i>	<i>below</i>	<i>decoding</i>	
3. <i>Student B</i>	<i>48/5</i>	<i>91%</i>	<i>below</i>	<i>decoding</i>	
4. <i>Student K</i>	<i>50/6</i>	<i>89%</i>	<i>below</i>	<i>decoding</i>	
5. <i>Student Q</i>	<i>54/4</i>	<i>93%</i>	<i>below</i>	<i>fluency</i>	<p>Determine instructional level</p>
6. <i>Student R</i>	<i>58/3</i>	<i>95%</i>	<i>below</i>	<i>fluency</i>	
7. <i>Student N</i>	<i>59/4</i>	<i>94%</i>	<i>below</i>	<i>fluency</i>	
8.					
9.					

Why work on fluency?

A number of comprehension problems are actually fluency problems.

Numerous studies have found a high correlation between fluency and comprehension.

Children usually cannot comprehend if they cannot read fluently.

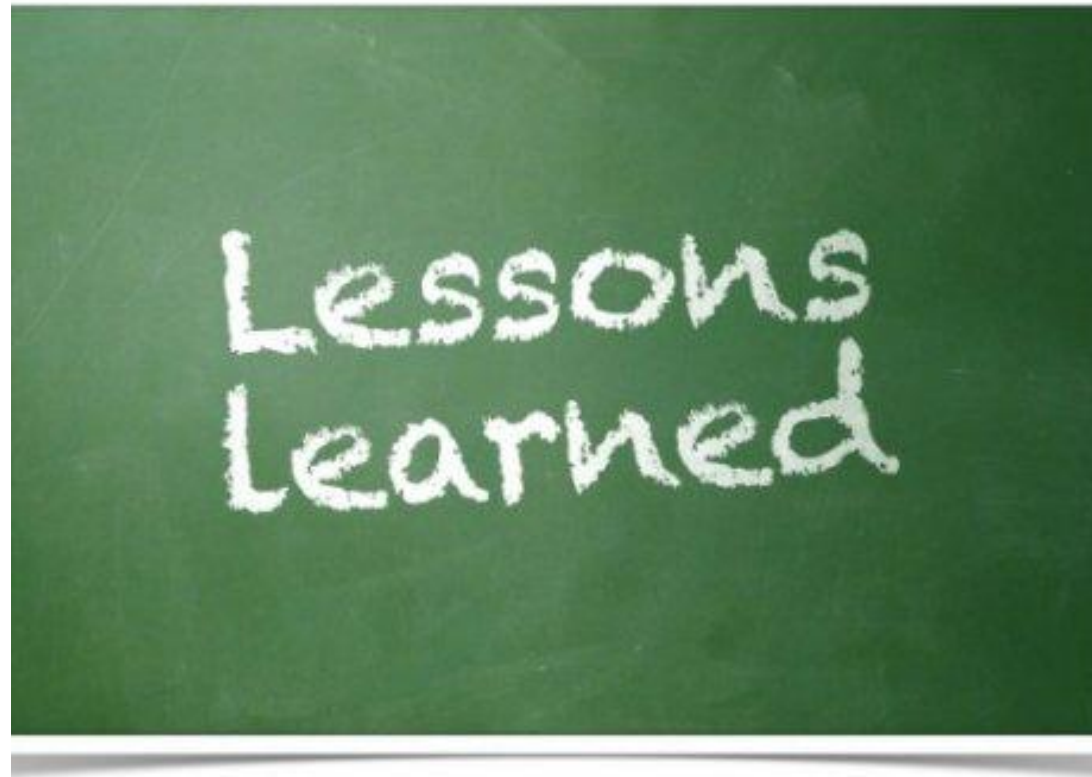


The expertise of teachers is strongly connected to general student achievement and in particular, student achievement in reading.

(Elish-Piper & L'Allier, 2010; McCutcheon et al., 2002; Swartz, 2005; Wharton-McDonald, Pressley, & Hampston, 1998; Darling-Hammond, 1999; Joyce & Showers, 2002).

Evidence Base

*"I used to think _____
now I think _____."*



[Image retrieved from www.churchplanting.com](http://www.churchplanting.com)

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PRESS

PRESS is a comprehensive approach to early literacy developed by the [Minnesota Center for Reading Research \(MCRR\)](#) in partnership with Minneapolis Schools, [Minnesota Reading Corps](#), and the [Target Corporation](#).

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Driven by research-based approaches to literacy, PRESS incorporates quality core instruction, data-driven instructional decisions and interventions, and meaningful professional development to support systemic change.

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