

DATA BASED DECISION MAKING IN THE RTI PROCESS: WEBINAR #2 SETTING GOALS & INSTRUCTION FOR THE GRADE

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NYS RtI TAC

Agenda

- Key Decisions When Analyzing Universal Screening Data
 - Goal setting with Benchmark Data
 - Procedures for Determining Goals
 - Instructional Decisions for Core Instruction

Without Data...



It's **ONLY** An Opinion!

Key Concepts

- Data, data, data
- Teams within schools
 - Core Team
 - Grade Level Team
- Follow the script!
- Keep to time limits
- Roles during meetings
- Move from grade level to individual level decisions
- Keep meeting focused on instruction
- Avoid distractions during meetings
- End meetings with purpose and summary

During the Meeting

1. Team accesses district-provided data sets
2. Team identifies current performance of grade level
3. Team sets measurable goal (s)
4. Team identifies research-based instructional strategies
5. Team analyzes suggested strategies
6. Team selects and agrees to implement strategies
7. Team plans logistics of strategy implementation
8. Team identifies which students will need more frequent assessment
9. Team sets next meeting date

Fall Benchmark Data

1. Team Accesses District-Provided Data Sets

View skills critical to meeting standards:

- Identify how many (%) students have attained skill (established).
- Identify how many (%) students are developing the skill (emerging).
- Identify how many (%) students are deficient in the skill (deficit) .

2. Team Identifies Current Performance of Grade Level

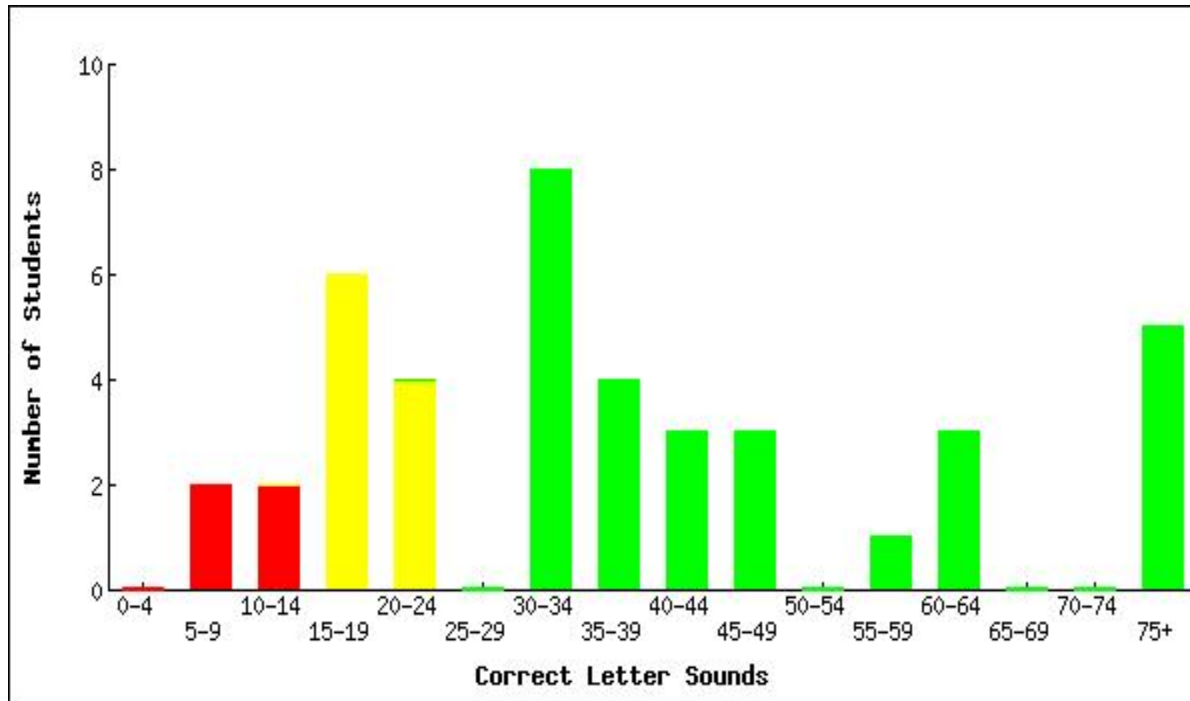
- Determine
 - % at risk
 - % some risk
 - % low risk
- Prompt

“Let’s analyze how our students are doing on (benchmark skill)?
- Record Keeping

Summarize salient data on SIRF or similar form

Nonsense Word Fluency

•**Benchmark Goal:** The benchmark goal is for all children to have established alphabetic principle skills of 50 or more on Nonsense Word Fluency by the middle of First Grade.



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66% (n=27) Low Risk



24% (n=10) Some Risk



10% (n=4) At Risk

3. Team Sets Measurable Goal

- Create brief statements describing expected attainments of group
- Set a deadline or target date
- For example: By January, 80% of students (2nd grade) will demonstrate proficiency on Oral Reading Fluency (>72 wcpm)

3. Team Sets Measurable Goal

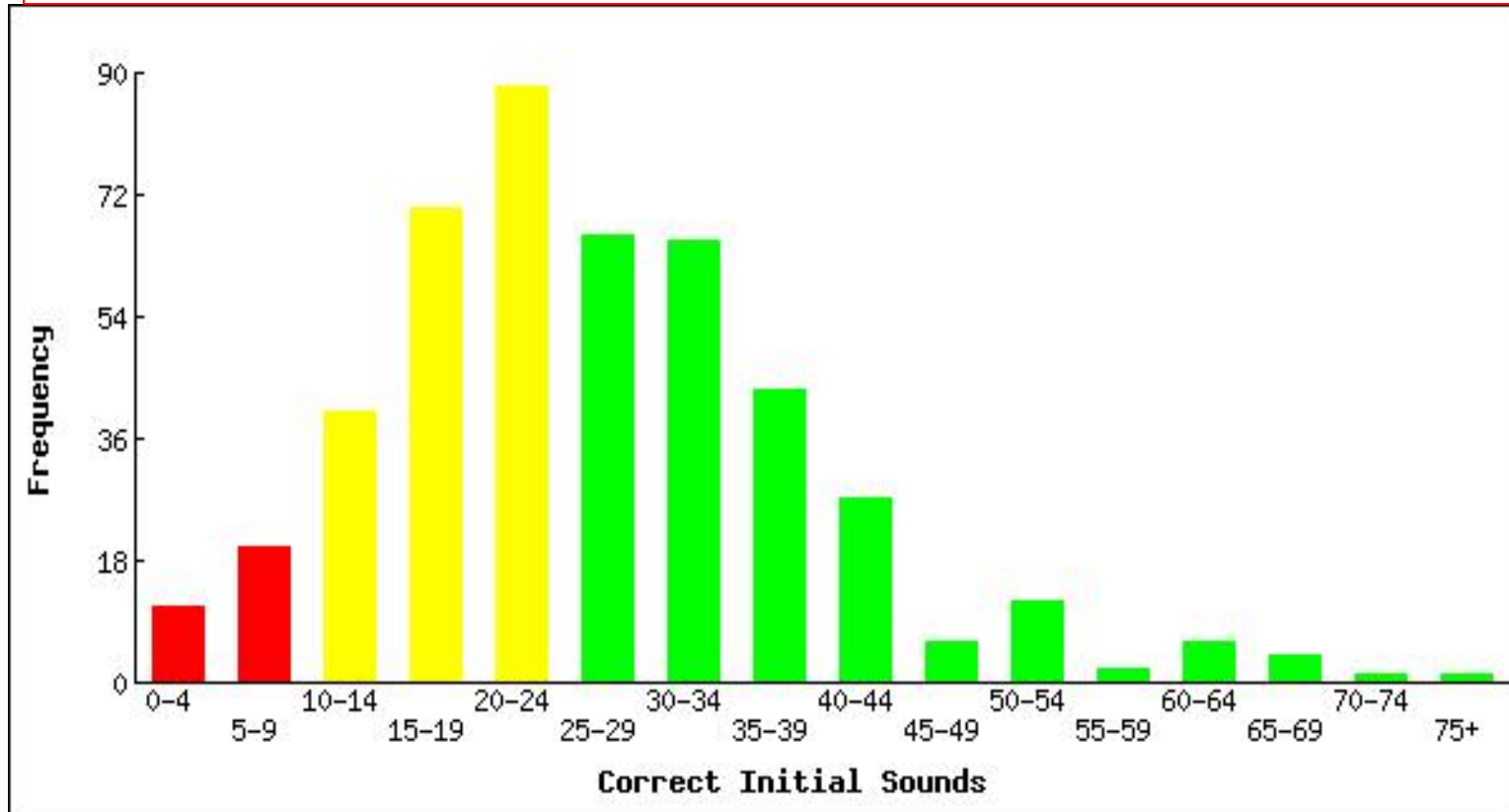
- Goal should be stated in terms of % of students making x progress toward identified benchmark
- Prompt
“What goal(s) shall we aim for by our next review point?”
- Record Keeping
 - Annotate measurable goal on SIRF or similar form
- Goal Setting should be empirically based

GOAL SETTING WITH BENCHMARK DATA

What you need for this...

- Building data in histogram and student-list formats.
- Norm tables from your assessment system (e.g., DIBELS Next, AIMSweb, STAR).

HISTOGRAM



Dibels Next benchmarks across the school year

Grade/ Measure	Fall Target	Winter Target	Spring Target	Typical ROI
K – FSF	10	30	N/A	N/A
K – NSF	0	17	28	0.78
1 – NWF	27	43	58	0.86
1 – ORF	0	23	47	1.31
2 – ORF	52	72	87	0.97
3 – ORF	70	86	100	0.83
4 – ORF	90	103	115	0.69
5 – ORF	111	120	130	0.53

AIMSWEB NORMS

		Fall		Winter		Spring		
Grade	%ile	Num	WRC	Num	WRC	Num	WRC	Group ROI
1	90	491845	67	55158	100	55158	128	1.69
	75		31		68		97	1.83
	50		13		36		67	1.50
	25		6		19		40	0.94
	10		2		11		22	0.56
	<i>Mean</i>		24		47		71	1.31
	<i>StdDev</i>		29		36		40	0.31
2	90	38282	115	38282	140	38282	156	1.14
	75		88		115		131	1.19
	50		62		88		106	1.22
	25		35		64		82	1.31
	10		17		39		59	1.17
	<i>Mean</i>		64		90		106	1.17
	<i>StdDev</i>		37		38		38	0.03
	90		143		162		179	1.00
	75		116		130		150	1.00

AIMSweb Norms Expanded – Gr 2

52		64		90		108	1.22
51		63		89		107	1.22
50		62		88		106	1.22
49		62		88		105	1.19
48		61		87		104	1.19
47		60		86		103	1.19
46		59		85		102	1.19
45		58		84		101	1.19
44		57		83		100	1.19
43	38282	56	38282	83	38282	99	1.19
42		55		82		98	1.19
41		54		81		97	1.19
40		53		80		96	1.19
39		52		79		95	1.19
38		51		77		94	1.19
37		50		76		93	1.19
36		49		75		92	1.19
35		47		74		91	1.22
34		46		73		90	1.22

STAR Reading Scaled Scores

Grade	Percentile	Fall September		Winter January		Spring May		Moderate Growth Rate
		Scaled Score	Est. ORF ^a	Scaled Score	Est. ORF ^a	Scaled Score	Est. ORF ^a	Scaled Score /Week
1	10	59	5	70	14	81	22	2.5
	20	64	9	76	18	92	27	2.8
	25	66	11	78	19	102	30	3.0
	40	72	15	88	25	150	41	3.3
	50	78	19	99	29	181	49	4.0
	75	132	37	198	54	263	72	5.3
	90	244	66	291	80	344	90	4.4
2	10	84	24	106	31	174	45	2.5
	20	100	30	161	42	227	58	4.0
	25	110	32	181	47	247	63	4.3
	40	166	43	232	60	299	78	4.0
	50	197	51	263	68	334	87	3.8
	75	280	73	352	92	434	114	3.2
	90	363	95	446	117	532	144	2.9
3	10	184	49	222	55	260	62	3.2
	20	236	57	274	66	315	74	3.2
	25	257	62	294	70	337	79	3.0
	40	310	73	352	82	394	95	3.0
	50	344	80	384	92	436	105	2.9
	75	447	108	491	118	545	132	2.2
	90	548	132	606	148	673	161	2.0

Purpose of Procedure

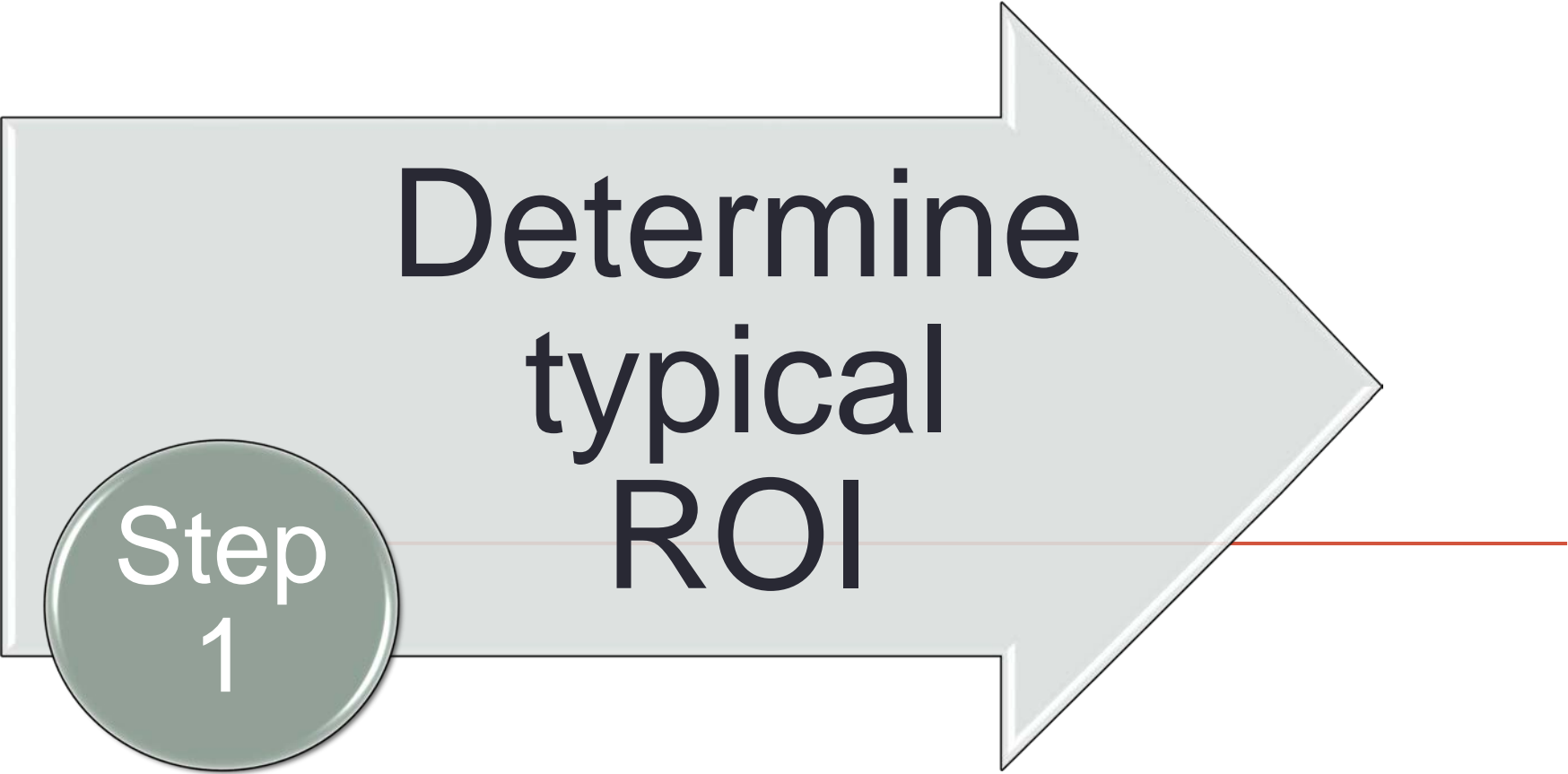
- ⦿ Pushing the pile of students toward benchmarks
- ⦿ Set goal for the number of students we hope to move by the next benchmark assessment:
 - Strategic to benchmark (Some risk to low risk)
 - Intensive to strategic (At risk to Some risk)

**We are looking at groups of students
in each grade level,
not individual students at this point!**



PROCEDURE FOR DETERMINING GOALS

A Multi-step Process



Determine
typical
ROI

Step
1

(DIBELS Next)

Grade Level Goal Setting

Procedures: Benchmark Charts


1. Determine the average rate of improvement (ROI) of students who start and end at benchmark across the year. Use 50th percentile for students in that grade or the ROI provided by the assessment product for students.
2. For the example in this training, we will use the Dibels Next ROI tables. Works the same for AIMSweb, STAR, or any measure with normative growth data

Step 1 Example: Dibels Next Benchmarks (not composite)

- Example: 2nd grade, average ROI of average students is 0.97.

DIBELS benchmarks & ROI (ROI based on 18 weeks between benchmarks, 36 total weeks):

Measure	Fall	Winter (Fall-Win ROI)	Spring (Win-Spr ROI)	Total Year ROI
K-FSF	10	30 (1.1)	N/A	N/A
K-PSF	0	20 (1.1)	40 (1.1)	1.11
K-NWF	0	17 (.9)	28 (.6)	0.78
1 - NWF (CLS)	27	43 (.9)	58 (.8)	0.86
1 - ORF	0	23 (1.3)	47 (1.3)	1.31
2 - ORF	52	72 (1.1)	87 (.8)	0.97
3 - ORF	70	86 (.9)	100 (.8)	0.83
4 - ORF	90	103 (.7)	115 (.7)	0.69
5 - ORF	111	120 (.5)	130 (.6)	0.53
6 - ORF	107	109 (.1)	120 (.6)	0.36



Determine
target
ROI

Step
2

DIBELS Next Example

To Determine the target ROI

- Multiply the ROI by a value of 1.5 or 2
 - 1.5 is conservative
 - 2 is ambitious
- Team should make decision
 - How far below target are students?
 - Grade level of students

Why multiply?

- ⦿ We need the target student to learn faster.
- ⦿ The rate of improvement needs to exceed the typical student's!
- ⦿ So if we want to double the student's rate of improvement, we would have to multiply by 2.
- ⦿ If we want to be a little less ambitious, we would multiply by 1.5.
- ⦿ ***For all the examples that follow, we will use the 1.5 multiplier.***

Example: Target Rate of Improvement

Multiply the average Rate of Improvement by 1.5.

2nd Grade ORF: $0.97 \times 1.5 = 1.46$

So if typical students have a rate of improvement of 0.97 words correct per minute per week, our plan for these students would be to accelerate their progress to 1.46 WCPM per minute per week.

Grade/ Measure	Fall Target	Winter Target	Spring Target	Typical ROI
2 – ORF	52	72	87	0.97



Step
3

Determine
Expected
Gain

Typical benchmark time is 18 weeks
(fall to winter – winter to spring).

Expected Gain

- ⦿ Multiply expected rate of improvement x number of weeks to the next benchmark =
Expected gain (EG) in the target measure

Example: 2nd Grade EG for ORF: $1.46 \times 18 = 26.3$ (round to 26)

- ⦿ So, we now expect the target students to gain 26 WCPM in the next 18 weeks.



Step
4

Calculate the
Cut-off
Score

Typical benchmark time is 18 weeks
(fall to winter – winter to spring).

Step 4. Determine how many students will get to benchmark by the next assessment (calculate cut-off score)

- ⦿ We expect all the students who are currently at benchmark to stay on track and get to benchmark by the next assessment.
- ⦿ We can also determine how many additional students who are currently below benchmark will get to benchmark, by using the expected gain (EG).
- ⦿ **To calculate this number we need to find a *cut-off score* to use.**
- ⦿ **Subtract the benchmark score for the next assessment period from the EG score**

Benchmark for Winter



Grade/ Measure	Fall Target	Winter Target	Spring Target	Typical ROI
2 – ORF	52	72	87	0.97

◎ **Winter Benchmark – Expected Gain =
Cut Score**

◎ **(72 – 26 = 46 is the cut off score)**



Step
5

Determine how
many

Students need to
get to benchmark

*Count the number of students from
the Cut-off score*

So, how many students would this be?

- Consult a list of outcomes of individual students
- Determine the number of students who are at the strategic level who are reading at or above the cut-off score calculated in step 4.

Student Scores

Score	Status
2	At Risk
7	At Risk
8	At Risk
10	At Risk
20	Some Risk
22	Some Risk
22	Some Risk
24	Some Risk
28	Some Risk
35	Some Risk
42	Some Risk
46	Some Risk
46	Some Risk
47	Some Risk
47	Some Risk
48	Some Risk
51	Some Risk
53	Low Risk
56	Low Risk
56	Low Risk
58	Low Risk
58	Low Risk
61	Low Risk
62	Low Risk
67	Low Risk
68	Low Risk
68	Low Risk
68	Low Risk
72	Low Risk
73	Low Risk
74	Low Risk
77	Low Risk
78	Low Risk
81	Low Risk
81	Low Risk
83	Low Risk
85	Low Risk

91	Low Risk
91	Low Risk
95	Low Risk
108	Low Risk
112	Low Risk
119	Low Risk
121	Low Risk

CUT-OFF
Score
(46)

6 between
46 and 52

Fall

61.4%

Low Risk

30.2%

Some Risk

9.1%

At Risk

Number of students

- The cut-off score gives you the starting place to count the number of additional students who are expected to reach benchmark by the next assessment.
- Add this number to the number of students already at benchmark to give the total number expected to reach benchmark.

Rule: Calculating Goal for moving strategic to benchmark

- Count every student with a score above the '**cut-off**' to determine the expected benchmark group.



Step
6

Convert the number
of students you
expect to reach
benchmark to a
percentage

Percentage Calculation

Calculating goal

- ◎ Example...from the cut-off score of **46**, the number of students from that number through benchmark is **6 + those from 52 (benchmark +=27) = 33**
- ◎ To convert this number to a percentage of students divide this number by the total number of students at the grade level.
- ◎ **33** Divided by 44 (total students) =75.0 %.
- ◎ **75.0%** should be your target goal of students at benchmark for the winter assessment.

Fall to Winter Goals for Group

61.4%



75.0%

Excel Tool for Calculating Group Goals

Setting Level Goals: **STRATEGIC** > **BENCHMARK**

See note

Step 1	Rate of Improvement (ROI) Enter		0.97	
Step 2	Expected ROI	1.5	1.46	Lower EROI
		2.0	1.94	Upper EROI
Step 3	EROI x wks to Benchmark	18	26	Expected Word Gained (EWG) at Lower Rate
		18	35	Expected Word Gained (EWG) at Upper Rate
Step 4	Find Cut-off Score Enter Next Benchmark Score	72	46	Cut-off score based on Lower Rate of Improvement (<i>Magic Number</i>)
			37	Cut-off score based on Upper Rate of Improvement (<i>Magic Number</i>)
Step 5	Enter # Students @ Benchmark	27		
	Enter # Students ≥ Lower Cut-off	6	33	Lower # Students Expected to Reach Benchmark
	Enter # Students ≥ Upper Cut-off	9	36	Upper # Students Expected to Reach Benchmark
Step 6	Calculation of Benchmark Goal Enter Total # of Students		75%	Goal: Lower Percentage of Students at Benchmark
		44	82%	Goal: Upper Percentage of Students at Benchmark

4. Team Selects Instructional Strategies

- With goal in mind, teachers identify specific strategies for teaching to the target skill
 - E.g., Need for attention to close reading for deep comprehension
 - E.g., Need for attention to new vocabulary embedded in story
 - E.g., Need for reflection on reading non-fiction
- Can use existing known strategies
- Keep focused on scientifically validated strategies

5. Team Analyzes Suggested Strategies

- Analyzes according to:
 - Strategy should be research-based
 - Strategy should be practical
 - Curricular materials should be available to implement strategy (or easily made).
- Prompt
“Let’s rate these strategies. Which ones have good research base? Of those, which ones are most practical? What materials do we have available? What materials do we need?”
- Record Keeping
Annotate newsprint of ideas

6. Team selects and agrees to implement strategies

- Prompt

“Based on what we see on the display, what’s our choice for the best strategy(ies)?”

- Record Keeping

Write an explicit description of the strategy on the SIRF

7. Team plans logistics of strategy

- Logistics of implementation
 - Team assists all teachers in learning strategy using
 - peer modeling and coaching
 - grade-level discourse regarding implementation
 - assistance by specialists (for demonstration of strategies only).
 - Team identifies instructional materials
 - Team plans for self-monitoring of use of strategy
 - Time to create/adapt materials
 - Strategies for teaching strategies to novice teachers

7. Team plans logistics of strategy continued...

- Record Keeping
- Prompt
 - “What do we need to do as a team to make this really happen for our students?”
 - “What do we have to do to ensure we *all* use this strategy as planned?”
 - “Who can help us with implementation?”
 - “How will we know that we are on track?”
- Annotate the SIRF or other forms with “to-do’s”

8. Team identifies which students will need more frequent monitoring

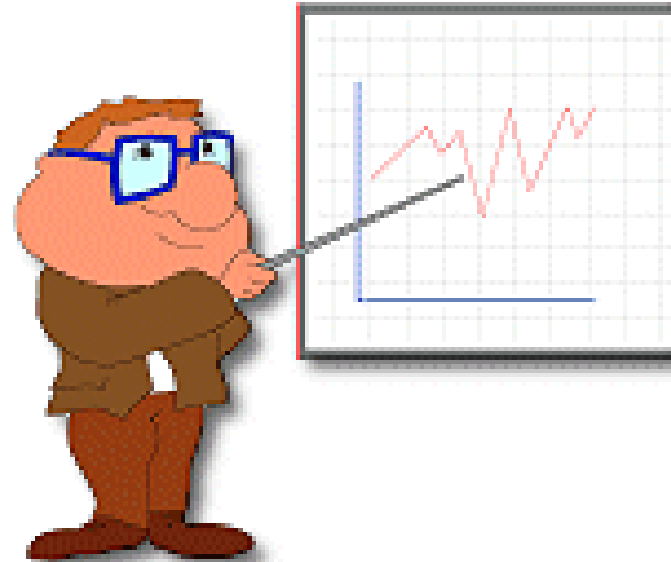
- Team identifies students needing more assistance
 - Most deficient students
 - “Stalled” students
- Prompt
 - “Which students do we really have to watch this quarter?”
 - “How will we measure their progress?”
 - “Who will help us with this monitoring?”
- Record Keeping
- Ongoing performance monitoring

9. Team sets next meeting date

- Prompt
- “When shall we meet again to review our progress?”
- Record Keeping
Annotate next date on SIRF

Interim Steps (Between meetings)

- Monitor fidelity of intervention
- Monitor students' progress
- Change (fine-tune) strategy (requires team meeting)



Who goes to Tier 2? Tier 1? Tier 3?

- Use data to identify students
- Use decision rules established at local level
- Annotate the decisions

End day 2

- Next Webinar- Monday, December 15, 2014
- 4 – 5:30 pm
- Key Decisions When Analyzing Progress Monitoring Data
 - Rate of Improvement: What It Is and How to Calculate It
 - Using ROI to Determine Student Response