



# Progress Monitoring & Response to Intervention in an Outcome Driven Model

Oregon RTI Summit  
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# Overview

- Overview of Response to Intervention
- Implementing a Response to Intervention model
- Using DIBELS<sup>®</sup> for systems-wide consultation and evaluating response to intervention with an Outcomes-Driven Model

# For Whom Would You Use RTI?

- Amy is a second grader who has been referred for a special education evaluation by her teacher due to low academic achievement.
- Miguel is a new bilingual student in Ms. Frizzle's first grade classroom (in a school with few other bilingual students). Ms. Frizzle does not know how to support Miguel in learning to read.
- Sander is a third grade student referred to the educational support team for behavior problems.
- Mica is a kindergarten child who has difficulty following directions and attending during group activities. His teacher has referred him for an "ADHD evaluation."

# What is Response to Intervention?

1. An alternative approach to determine eligibility for learning disability under IDEA 2004:
  - Response to intervention (RTI) functions as an alternative for learning disability (LD) evaluations within the general evaluation requirements of IDEA 2004 (20 U.S.C 1414 (B)(6)(A)) .
  - IDEA 2004 adds a new concept in eligibility that prohibits children from being found eligible for special education if they have not received instruction in reading that includes the five essential components of reading instruction identified by the Reading First Program. RTI is included under this general umbrella.

# What is Response to Intervention?

2. An approach for maximizing student learning/progress through sensitive measurement of effects of instruction:
  - Diagnostic teaching
  - Precision teaching
  - Problem-solving model
  - Outcomes-driven model

# Description of RTI

- Students are provided with “generally effective” instruction by classroom teacher.
- Progress of students receiving general education is monitored.
- Students who do not respond are identified.
- “Nonresponders” to general education instruction receive something else or something more, either from teacher or someone else.
- Progress of students receiving “something else/more” is monitored.

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**Eligibility approach:** Those who do not respond qualify for special education/evaluation.

**Maximize learning approach:** Those who do not respond get “something else/more” until they respond.

# Underlying Assumptions of RTI

- **Eligibility Model**
  - Disabilities are due to within child factors and are intractable.
  - There are children who are “nonresponders.”
  - Goal is special education placement.
- **Maximize Learning Model**
  - Most children can learn when provided with effective instruction.
  - There are children for whom we have not yet found effective interventions.
  - Goal is to find the “match,” i.e., instructional approach/strategies effective for the individual student.

## Our View:

- Inadequate response to intervention is NOT a defensible endpoint.
- Response to intervention IS a defensible means to maximize student learning and progress.

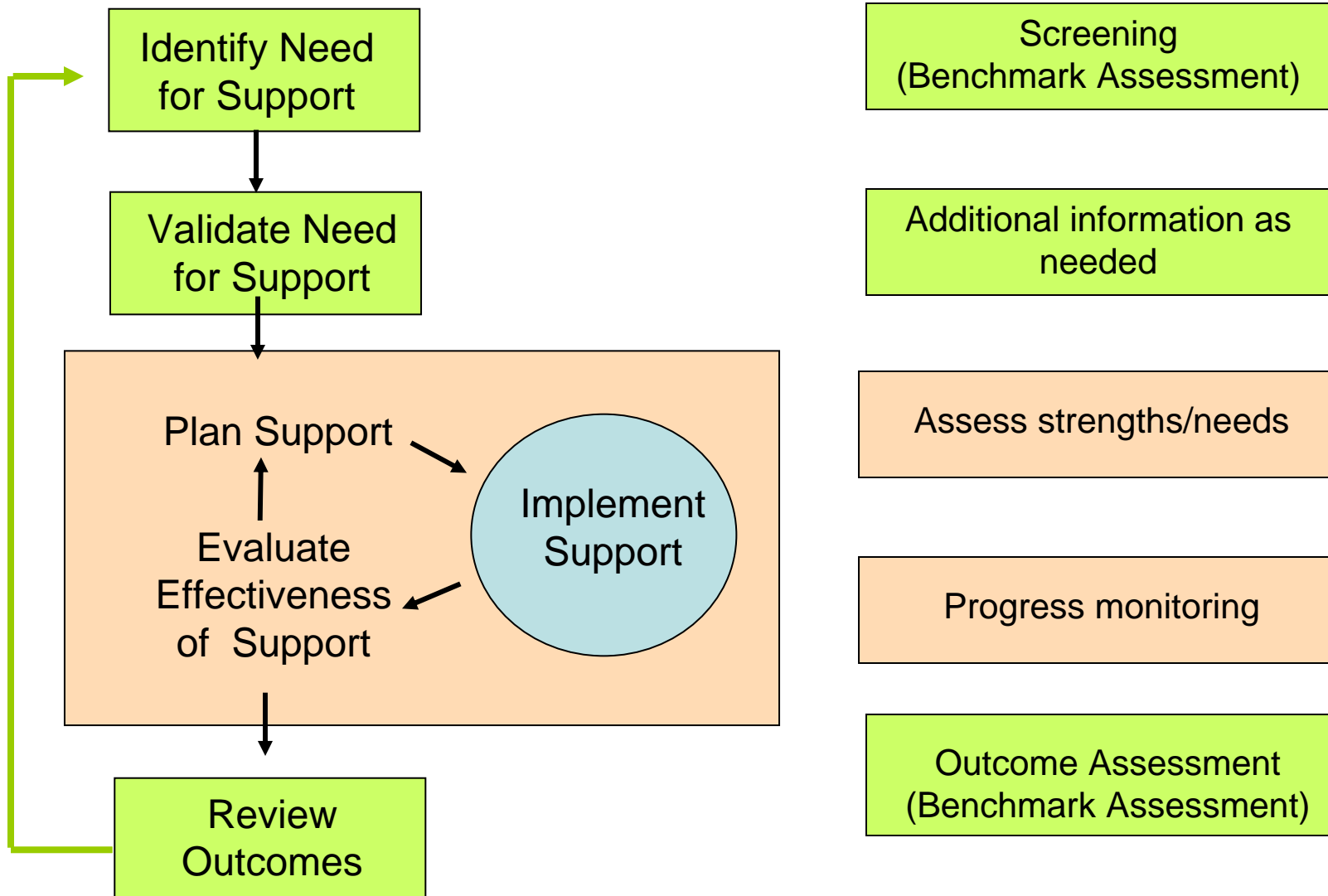


# When and for Whom Should RTI be Used?

- All students
- Within a *prevention-oriented* system of *progress monitoring* and *evaluating system-wide effectiveness: Outcomes Driven Model*

ODM Step	Decisions/Questions	Data
1. Identify Need	Are there students who may need support? How many? Which students?	Screening data (DIBELS Benchmark data)
2. Validate Need	Are we confident that the identified students need support?	Diagnostic assessment data and additional information as needed
3. Plan and Implement Support	What level of support for which students? How to group students? What goals, specific skills, curriculum/program, instructional strategies?	Diagnostic assessment data and additional information as needed
4. Evaluate and Modify Support	Is the support effective for individual students?	Progress Monitoring data (DIBELS progress monitoring data)
5. Evaluate Outcomes	As a school/district: How effective is our core (benchmark) support? How effective is our supplemental (strategic) support? How effective is our intervention (intensive) support?	Outcome Assessment information (DIBELS Benchmark data)

# Outcomes-Driven Model



# Why Use a RTI Approach? (Why Use the ODM?)

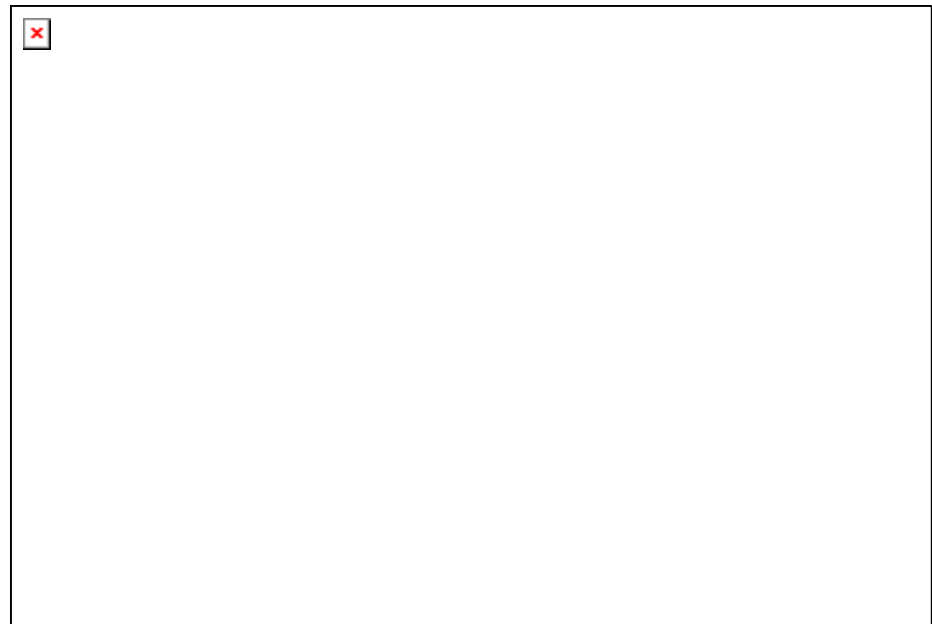
- Preventive: Provides help more quickly to more students
- Inclusive: Focuses on success for all students
- Instructionally relevant: Keeps focus on student learning; shift away from labeling
- Cost effective: Reduces need for special education
- Collaborative: Increases teaming and integration of services

# What are Critical Components of an Effective RTI Model?

- Team approach
- Specification of system of support
- Specification of procedures for RTI
  - Model of RTI
  - Measurement
  - Intervention fidelity
  - Criteria for effectiveness

# Team Approach: Who Should be on the Team?

- Everyone who has a vested interest in this student's success, for example:
  - Classroom teachers
  - Parents
  - Title/Resource teachers
  - Special Education teachers
  - Speech/language pathologists
  - School psychologists
  - Reading coaches/specialists
  - Principals



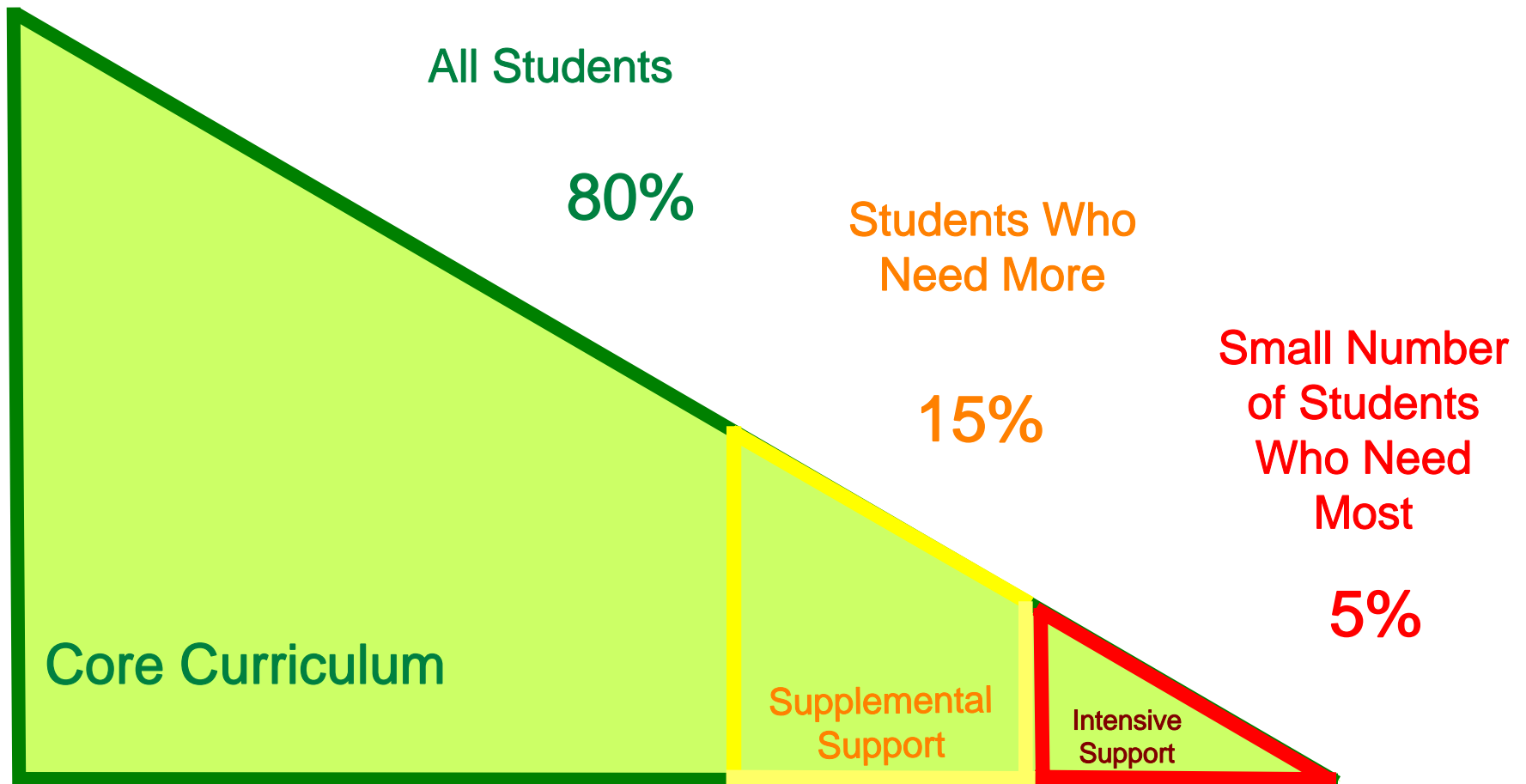


# School-Wide System of Support

- We recommend that RTI be implemented within a clearly specified school-wide system of instruction and support.

# School-wide System of Instruction and Support: Three Levels (Tiers) of Support

- Continuum of generally effective services of varying intensity





# Specifying a System of Support

- Who will receive what intervention, by whom, for what amount of time, when?
- What materials and strategies will be used?
- What measures will be used for progress monitoring?
- How frequently will progress monitoring occur?
- What criteria will be used to determine effectiveness of intervention?

# Specify Procedures for RTI

- RTI Model
- Measures
- Intervention Fidelity
- Criteria for determining effectiveness (adequate responsiveness)

# RTI Models

- Standard protocol
  - Student receives specified intervention program for specified amount of time (e.g., Read Well for 12 weeks)
- Individual Problem solving
  - Student receives individually designed intervention program

# Measurement for RTI

- State-wide or group achievement tests
- Individually administered achievement tests
- Curriculum-based assessments
- General outcome measures
  - Curriculum-Based Measurement
  - Dynamic Indicators of Basic Early Literacy Skills
  - Individual Growth and Development Indicators

# Fidelity of Intervention Implementation

- We must measure fidelity of implementation of interventions at all levels of the continuum
  - *Who* will measure treatment integrity?
  - *How* will treatment integrity be measured?

# Determining Effectiveness

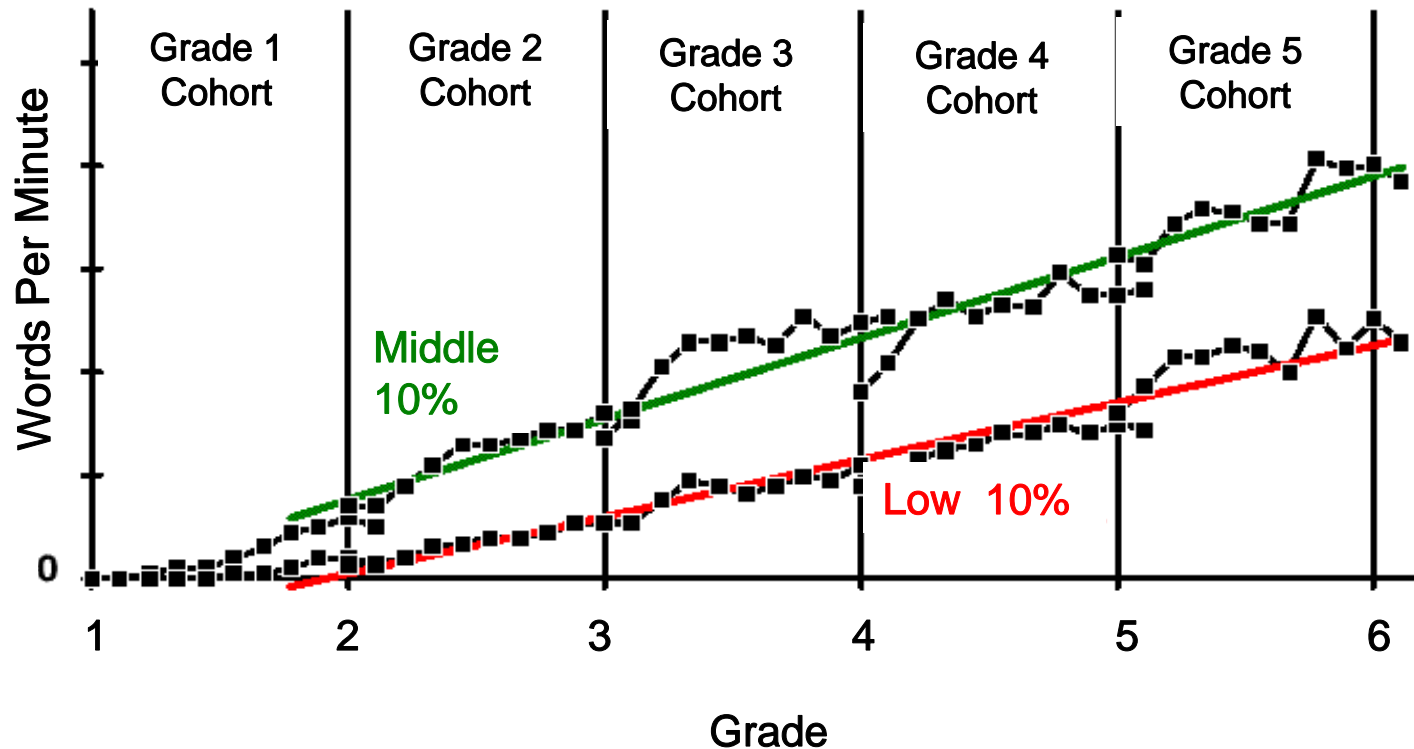
## Option 1: Final status

- Test students after intervention, apply a standard, and separate the “responders” from the “non-responders”
  - Ending in the average range on a norm-referenced measure
  - Ending at or above an established benchmark criterion

# Determining Effectiveness

- Option 2: Growth Models
  - Repeatedly test students during intervention, establish growth trajectories, and separate the “responders” from the “non-responders”.
    - Compare the student’s actual rate of progress to the expected rate of progress, based on a normative framework.
    - Compare the student’s actual rate of progress to a limited normative framework (e.g., other students receiving intensive intervention).
    - Compare the student’s actual rate of progress to the expected rate of progress, based on a criterion for acceptable growth.

# Reading Trajectories of Low and Middle Readers Grades 1-6



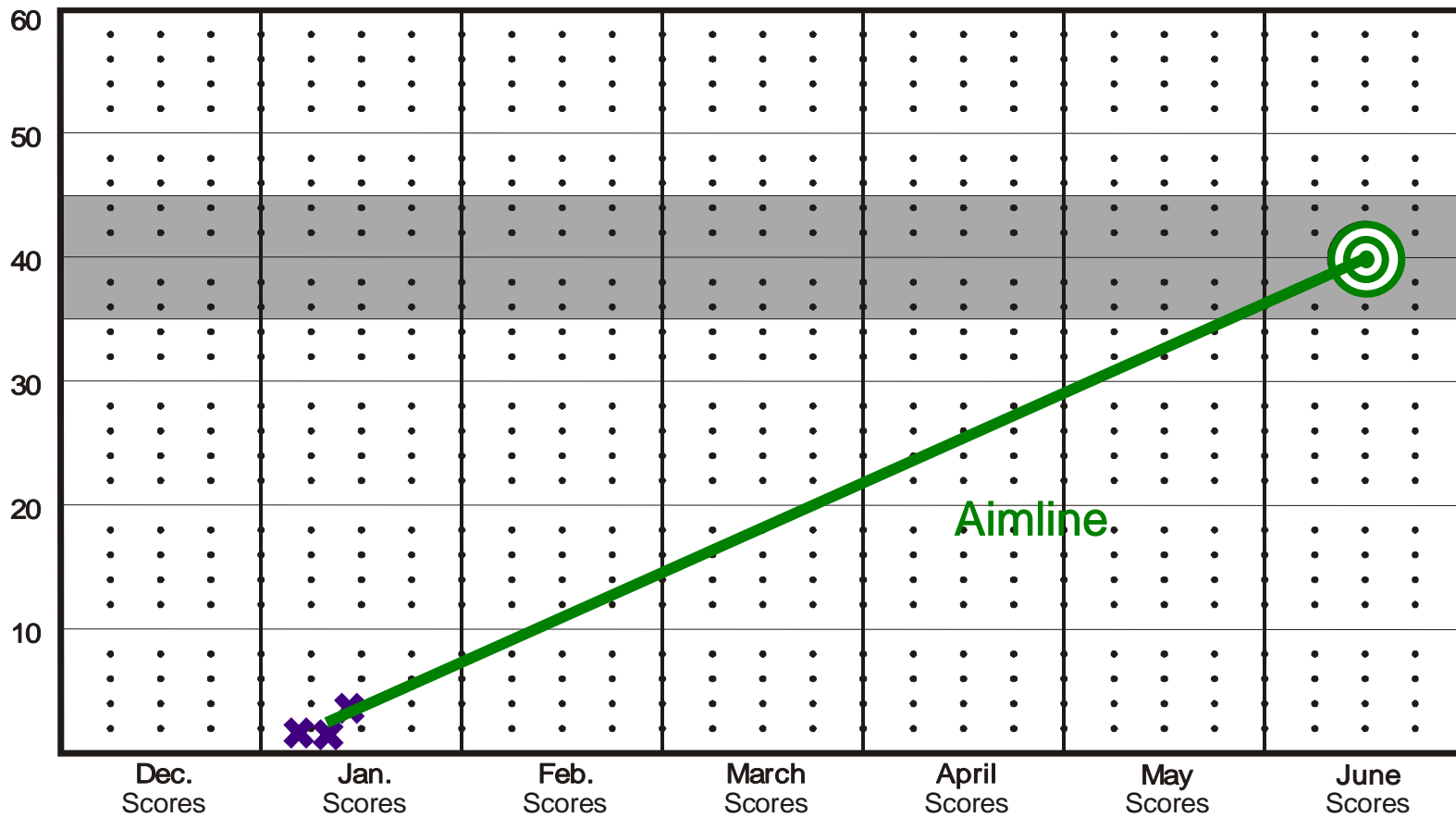


## Example of Oral Reading Fluency Growth Rates\*

<b>Grade</b>	<b>Minimum growth rate</b>	<b>Slope of benchmark targets (growth per week)</b>	<b>Maximum growth rate</b>
1	0.84	1.36	1.88
2	1.03	1.31	1.59
3	0.75	1.03	1.31
4	0.55	0.83	1.11
5	0.50	0.78	1.06
6	0.58	0.86	1.14
7	0.30	0.58	0.86
8	0.28	0.56	0.84

\* Based on average growth rates.  
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# Plan Support: Aimline for Brandon



The aimline connects where you are to where you want to get to, and shows the course to follow to get there.

# Effectiveness Report: Classroom Kindergarten Mid to End of Year

Sneezy Elementary: Ms. White PM Class

## Dynamic Indicators of Basic Early Literacy Skills Summary of Effectiveness by Class

District: Seven Dwarfs Public Schools  
 School: Sneezy Elementary  
 Date: January, 2004-2005  
 Class: Ms. WhitePM  
 Step: Middle of Kindergarten to End of Kindergarten

Effectiveness of Intensive Support Program				Effectiveness of Strategic Support Program				Effectiveness of Core Curriculum and Instruction			
Students at Intensive at Middle of Year	Middle PSF Score	End PSF Score	Check If Reached End PSF Goal of 35	Students at Strategic at Middle of Year	Middle PSF Score	End PSF Score	Check If Reached End PSF Goal of 35	Students at Benchmark at Middle of Year	Middle PSF Score	End PSF Score	Check If Reached End PSF Goal of 35
	0	17	☹		8	17			53	60	✓
	14	8			0	32	☹		10	15	
	10	41	✓		20	41	✓		19	40	✓
					0	7			32	48	✓
					11	38	✓		44	42	✓
									34	42	✓
									51	42	✓
									25	14	
									38	56	✓
									29	59	✓
									47	59	✓
									43	37	✓

# Determining Effectiveness

- Option 3: Dual Focus on Final Status and Growth
  - Combination of previous approaches; requires repeated assessment of student skills throughout intervention and assessment of final status after intervention
  - Evaluate responsiveness by comparing the student's actual rate of growth to an expected rate of growth based on a normative/criterion framework and considering whether the student's final status meets an established benchmark criterion

# Our Thoughts

- To promote positive outcomes and reading success for *all students*:
  - We need to evaluate effectiveness of the instructional context, i.e., the *system* of support.
  - We need to use a standard-protocol approach in combination with a problem-solving approach.
  - We need to use established (i.e., normative and/or research-based) outcomes criteria.

# How to Put it all Together

- DIBELS<sup>®</sup> as a tool for Systems-Wide Consultation and Evaluating Response to Intervention
  - Evaluating system effectiveness
  - Evaluating student responsiveness to intervention within a system

# Using DIBELS in a Systems-Wide RTI Standard Protocol + Problem-Solving Approach

- Benchmark assess all students 3 times per year.
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 School: All Schools  
 Data: 2001-2002  
 Step: Beginning of 1st Grade to Middle of 1st Grade

# Report: System of support?

of Basic Early Literacy Skills  
 Summary of Effectiveness by District

District: Test District  
 School: All Schools  
 Date: 2001-2002  
 Step: Beginning of 1st Grade to Middle of 1st Grade

## Intensive

## Strategic

## Benchmark

## All

District Name

School Names

Beginning of First Instructional Recommendation to Middle of First Benchmark Status on NWF	Intensive at Beginning of Year to			Strategic at Beginning of Year to			Benchmark at Beginning of Year to			Benchmark Status on NWF in Middle of First (Totals)
	Mid-Year Deficit	Mid-Year Emerging	Mid-Year Established	Mid-Year Deficit	Mid-Year Emerging	Mid-Year Established	Mid-Year Deficit	Mid-Year Emerging	Mid-Year Established	
<b>Test District</b>	49 Students Intensive at Beginning of 1st 12.1% of Total Students			101 Students Strategic at Beginning of 1st 24.9% of Total Students			256 Students Benchmark at Beginning of 1st 63.1% of Total Students			N = 406
Count	16	18	15	11	44	46	4	43	209	Deficit 7.6%
% of Instructional Recommendation	32.7%	36.7%	30.6%	10.9%	43.6%	45.5%	1.6%	16.8%	81.6%	Emerging 25.9%
% of Total	3.9%	4.4%	3.7%	2.7%	10.8%	11.3%	1%	10.6%	51.5%	Established 66.5%
<b>Adams</b>	5 Students Intensive at Beginning of 1st 6.8% of Total Students			18 Students Strategic at Beginning of 1st 24.7% of Total Students			50 Students Benchmark at Beginning of 1st 68.5% of Total Students			n = 73
Count	1	3	1	3	11	4	1	8	41	Deficit 6.8%
% of Instructional Recommendation	20%	60%	20%	16.7%	61.1%	22.2%	2%	16%	82%	Emerging 30.1%
% of Total	1.4%	4.1%	1.4%	4.1%	15.1%	5.5%	1.4%	11%	56.2%	Established 63%
<b>Garfield</b>	5 Students Intensive at Beginning of 1st 9.8% of Total Students			12 Students Strategic at Beginning of 1st 23.5% of Total Students			34 Students Benchmark at Beginning of 1st 66.7% of Total Students			n = 51
Count	2	2	1	0	3	9	0	7	27	Deficit 3.9%
% of Instructional Recommendation	40%	40%	20%	0%	25%	75%	0%	20.6%	79.4%	Emerging 23.5%
% of Total	3.9%	3.9%	2%	0%	5.9%	17.6%	0%	13.7%	52.9%	Established 72.5%
<b>Jefferson</b>	14 Students Intensive at Beginning of 1st 20.6% of Total Students			18 Students Strategic at Beginning of 1st 26.5% of Total Students			36 Students Benchmark at Beginning of 1st 52.9% of Total Students			n = 68
Count	3	2	9	2	7	9	1	7	28	Deficit 8.8%
% of Instructional Recommendation	21.4%	14.3%	64.3%	11.1%	38.9%	50%	2.8%	19.4%	77.8%	Emerging 23.5%
% of Total	4.4%	2.9%	13.2%	2.9%	10.3%	13.2%	1.5%	10.3%	41.2%	Established 67.6%
<b>Lincoln</b>	10 Students Intensive at Beginning of 1st 13.9% of Total Students			17 Students Strategic at Beginning of 1st 23.6% of Total Students			45 Students Benchmark at Beginning of 1st 62.5% of Total Students			n = 72
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% of Total	4.2%	5.6%	4.2%	2.8%	11.1%	9.7%	0%	12.5%	50%	Established 63.9%
<b>McKinley</b>	10 Students Intensive at Beginning of 1st 18.2% of Total Students			12 Students Strategic at Beginning of 1st 21.8% of Total Students			33 Students Benchmark at Beginning of 1st 60% of Total Students			n = 55
Count	5	4	1	1	10	1	1	10	22	Deficit 12.7%
% of Instructional Recommendation	50%	40%	10%	8.3%	83.3%	8.3%	3%	30.3%	66.7%	Emerging 43.6%
% of Total	9.1%	7.3%	1.8%	1.8%	18.2%	1.8%	1.8%	18.2%	40%	Established 43.6%
<b>Washington</b>	5 Students Intensive at Beginning of 1st 5.7% of Total Students			24 Students Strategic at Beginning of 1st 27.6% of Total Students			58 Students Benchmark at Beginning of 1st 66.7% of Total Students			n = 87
Count	2	3	0	3	5	16	1	2	55	Deficit 6.9%
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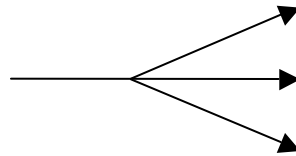


# 4 Ways to Achieve Adequate Responsiveness to Intervention

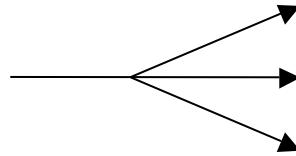
Time 1 (e.g., Fall)

Time 2 (e.g., Winter)

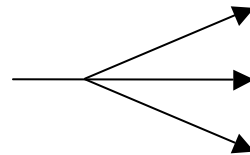
Intensive



Strategic



Benchmark



# What is an Effective System of Support?

- Benchmark Students

- *Effective core curriculum & instruction* should:
  - support **95%** of benchmark students to achieve each literacy goal.

- Strategic Students

- *Effective supplemental support* should:
  - support **80%** of strategic students to achieve each literacy goal.

- Intensive Students

- *Effective interventions* should:
  - support **80%** of intensive students to achieve the goal or achieve emerging or some risk status.

Example: Washington Elementary

First Grade Classroom #3

Cassandra

# Using DIBELS in a Systems-Wide RTI Standard Protocol + Problem-Solving Approach

- Benchmark assess all students 3 times per year.
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Summary of Effectiveness by District**

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# Washington School: Effectiveness of Core

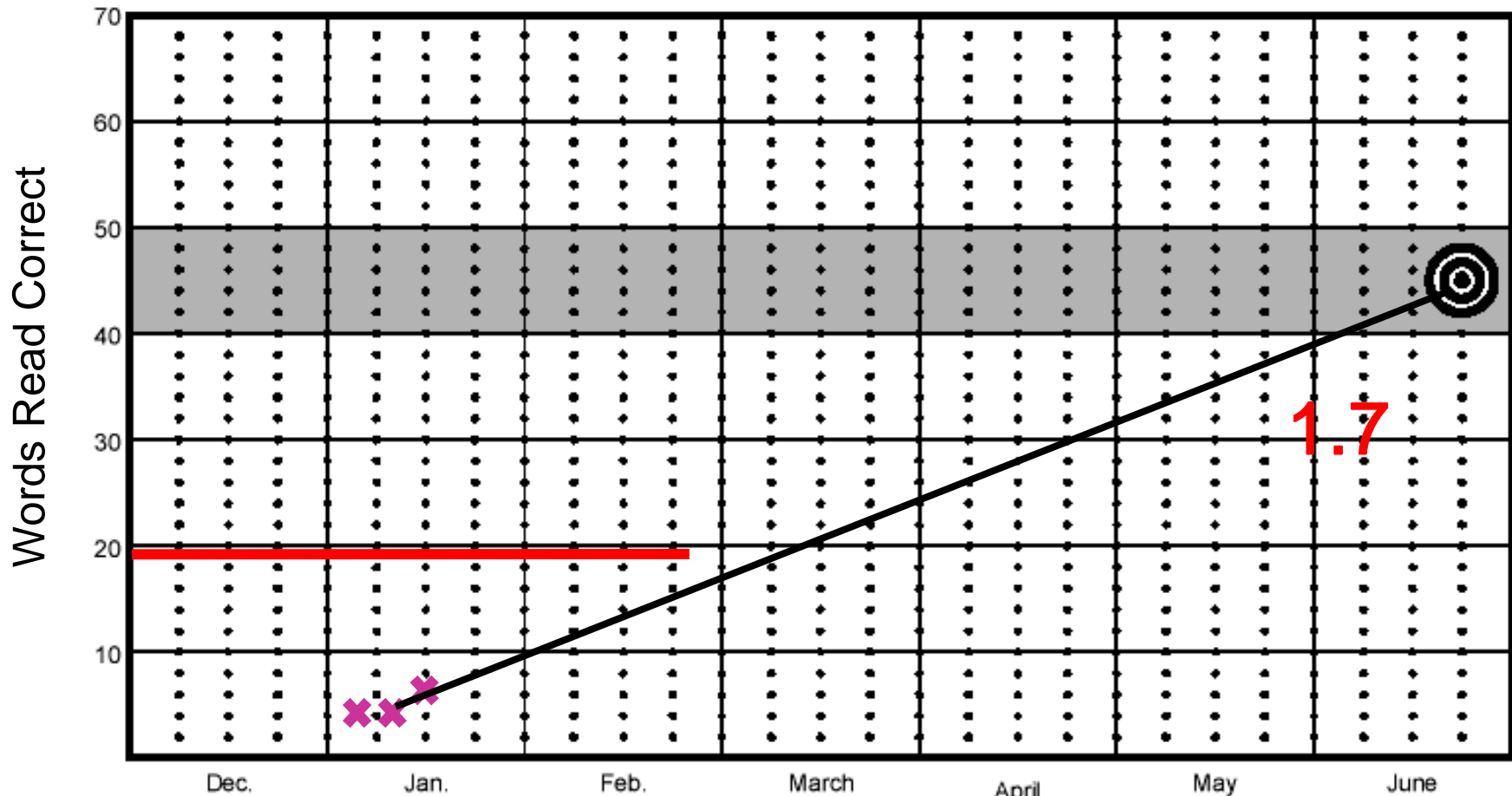
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# Cassandra: Identify and Validate Need for Support

Verify Need for Instructional Support by Retesting with Different Forms Until We Are Reasonably Confident.



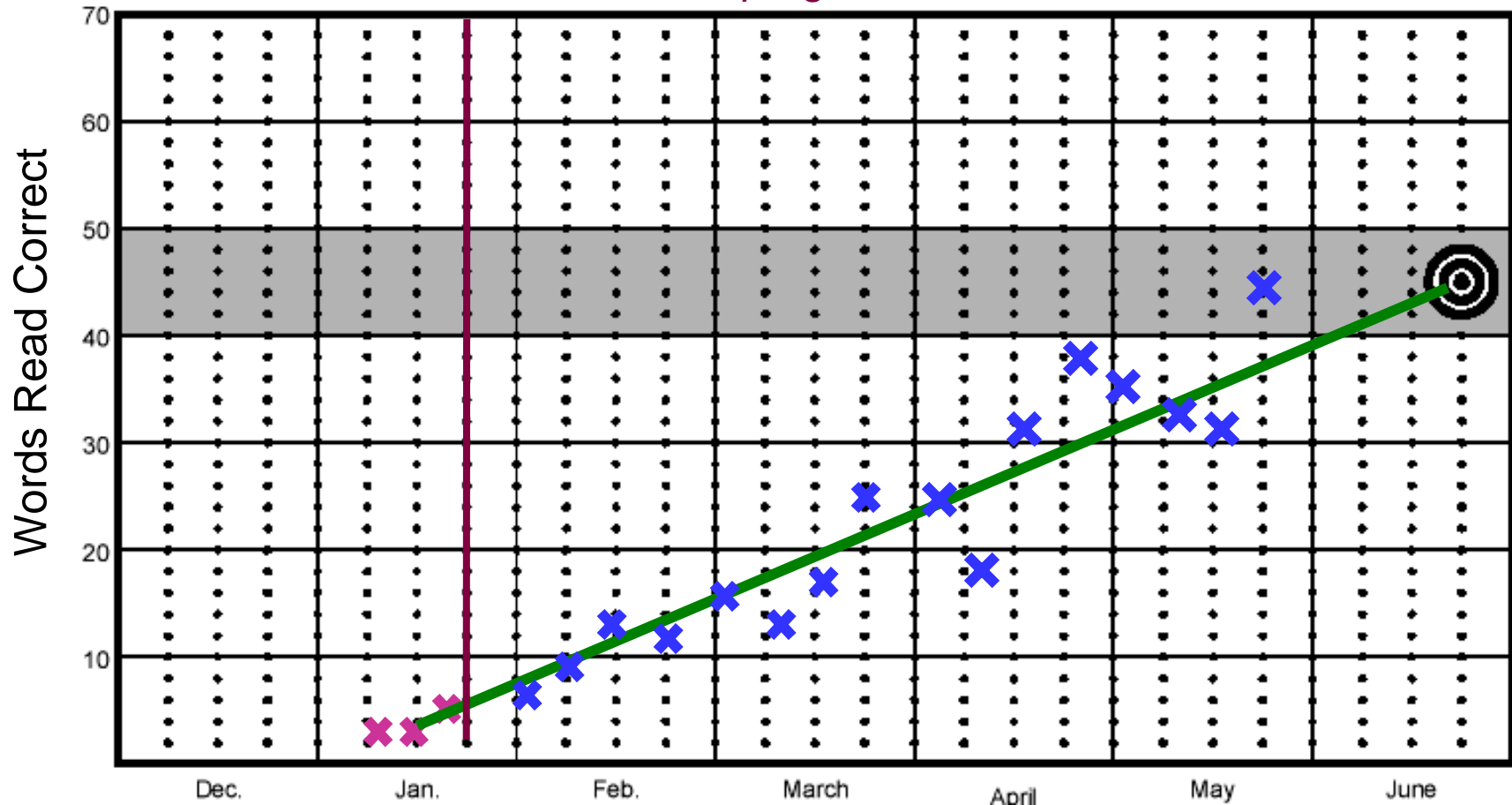


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# Cassandra: Evaluating Responsiveness to Intervention

Tier 2 Support: add'l 30 min small group using research-based program



Example: McKinley Elementary

First Grade Classroom #5

Matthew, Tia

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Beginning of First Instructional Recommendation to Middle of First Benchmark Status on NWF	Intensive at Beginning of Year to			Strategic at Beginning of Year to			Benchmark at Beginning of Year to			Benchmark Status on NWF in Middle of First (Totals)
	Mid-Year Deficit	Mid-Year Emerging	Mid-Year Established	Mid-Year Deficit	Mid-Year Emerging	Mid-Year Established	Mid-Year Deficit	Mid-Year Emerging	Mid-Year Established	
<b>Test District</b>	49 Students Intensive at Beginning of 1st 12.1% of Total Students			101 Students Strategic at Beginning of 1st 24.9% of Total Students			256 Students Benchmark at Beginning of 1st 63.1% of Total Students			N = 406
Count	16	18	15	11	44	46	4	43	209	Deficit 7.6%
% of Instructional Recommendation	32.7%	36.7%	30.6%	10.9%	43.6%	45.5%	1.6%	16.8%	81.6%	Emerging 25.9%
% of Total	3.9%	4.4%	3.7%	2.7%	10.8%	11.3%	1%	10.6%	51.5%	Established 66.5%
<b>Adams</b>	5 Students Intensive at Beginning of 1st 6.8% of Total Students			18 Students Strategic at Beginning of 1st 24.7% of Total Students			50 Students Benchmark at Beginning of 1st 68.5% of Total Students			n = 73
Count	1	3	1	3	11	4	1	8	41	Deficit 6.8%
% of Instructional Recommendation	20%	60%	20%	16.7%	61.1%	22.2%	2%	16%	82%	Emerging 30.1%
% of Total	1.4%	4.1%	1.4%	4.1%	15.1%	5.5%	1.4%	11%	56.2%	Established 63%
<b>Garfield</b>	5 Students Intensive at Beginning of 1st 9.8% of Total Students			12 Students Strategic at Beginning of 1st 23.5% of Total Students			34 Students Benchmark at Beginning of 1st 66.7% of Total Students			n = 51
Count	2	2	1	0	3	9	0	7	27	Deficit 3.9%
% of Instructional Recommendation	40%	40%	20%	0%	25%	75%	0%	20.6%	79.4%	Emerging 23.5%
% of Total	3.9%	3.9%	2%	0%	5.9%	17.6%	0%	13.7%	52.9%	Established 72.5%
<b>Jefferson</b>	14 Students Intensive at Beginning of 1st 20.6% of Total Students			18 Students Strategic at Beginning of 1st 26.5% of Total Students			36 Students Benchmark at Beginning of 1st 52.9% of Total Students			n = 68
Count	3	2	9	2	7	9	1	7	28	Deficit 8.8%
% of Instructional Recommendation	21.4%	14.3%	64.3%	11.1%	38.9%	50%	2.8%	19.4%	77.8%	Emerging 23.5%
% of Total	4.4%	2.9%	13.2%	2.9%	10.3%	13.2%	1.5%	10.3%	41.2%	Established 67.6%
<b>Lincoln</b>	10 Students Intensive at Beginning of 1st 13.9% of Total Students			17 Students Strategic at Beginning of 1st 23.6% of Total Students			45 Students Benchmark at Beginning of 1st 62.5% of Total Students			n = 72
Count	3	4	3	2	8	7	0	9	36	Deficit 6.9%
% of Instructional Recommendation	30%	40%	30%	11.8%	47.1%	41.2%	0%	20%	80%	Emerging 29.2%
% of Total	4.2%	5.6%	4.2%	2.8%	11.1%	9.7%	0%	12.5%	50%	Established 63.9%
<b>McKinley</b>	10 Students Intensive at Beginning of 1st 18.2% of Total Students			12 Students Strategic at Beginning of 1st 21.8% of Total Students			33 Students Benchmark at Beginning of 1st 60% of Total Students			n = 55
Count	5	4	1	1	10	1	1	10	22	Deficit 12.7%
% of Instructional Recommendation	50%	40%	10%	8.3%	83.3%	8.3%	3%	30.3%	66.7%	Emerging 43.6%
% of Total	9.1%	7.3%	1.8%	1.8%	18.2%	1.8%	1.8%	18.2%	40%	Established 43.6%
<b>Washington</b>	5 Students Intensive at Beginning of 1st 5.7% of Total Students			24 Students Strategic at Beginning of 1st 27.6% of Total Students			58 Students Benchmark at Beginning of 1st 66.7% of Total Students			n = 87
Count	2	3	0	3	5	16	1	2	55	Deficit 6.9%
% of Instructional Recommendation	40%	60%	0%	12.5%	20.8%	66.7%	1.7%	3.4%	94.8%	Emerging 11.5%
% of Total	2.3%	3.4%	0%	3.4%	5.7%	18.4%	1.1%	2.3%	63.2%	Established 81.6%

# McKinley School Effectiveness of Core

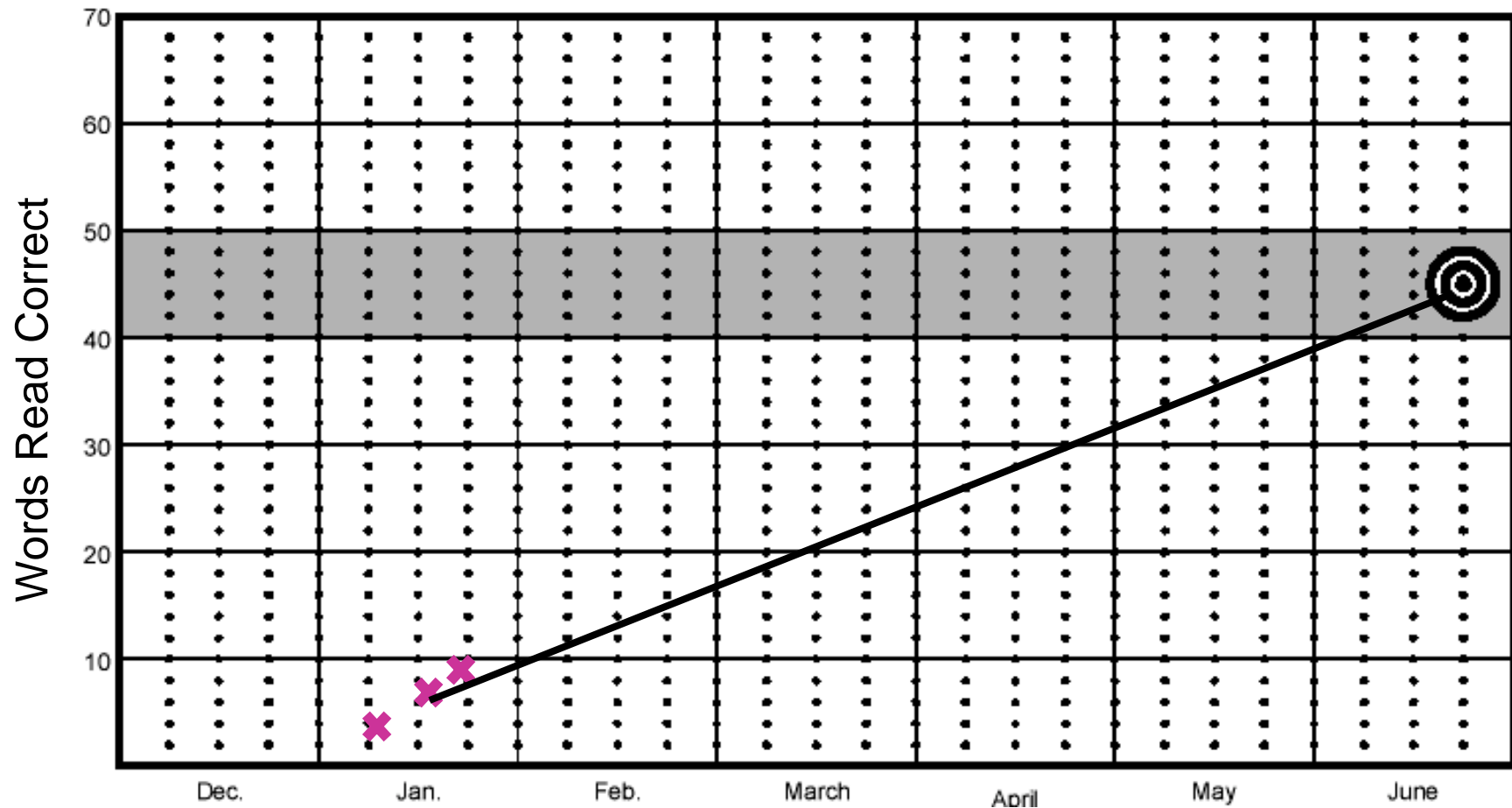
33 Students Benchmark at Beginning of 1st 60% of Total Students			n = 55	
1 3%	10 30.3%	22 66.7%	Deficit	12.7%
			Emerging	43.6%
			Established	43.6%

# Using DIBELS in a Systems-Wide RTI Standard Protocol + Problem-Solving Approach

- Benchmark assess all students 3 times per year.
- Review effectiveness of system of support/intervention each benchmark period.
- Identify (and validate) students needing additional support each benchmark period.
- For students needing additional support, implement & monitor response to a predetermined research-based intervention.
- If response is not adequate, develop & implement an intervention designed for the individual needs of the student.
- If response is not adequate, modify intervention and continue implementation.
- If response continues to be inadequate, student *may* need special education support.
- *Continue to modify intervention and evaluate responsiveness until the desired outcomes are achieved.*

# Matthew: Validate Need for Support

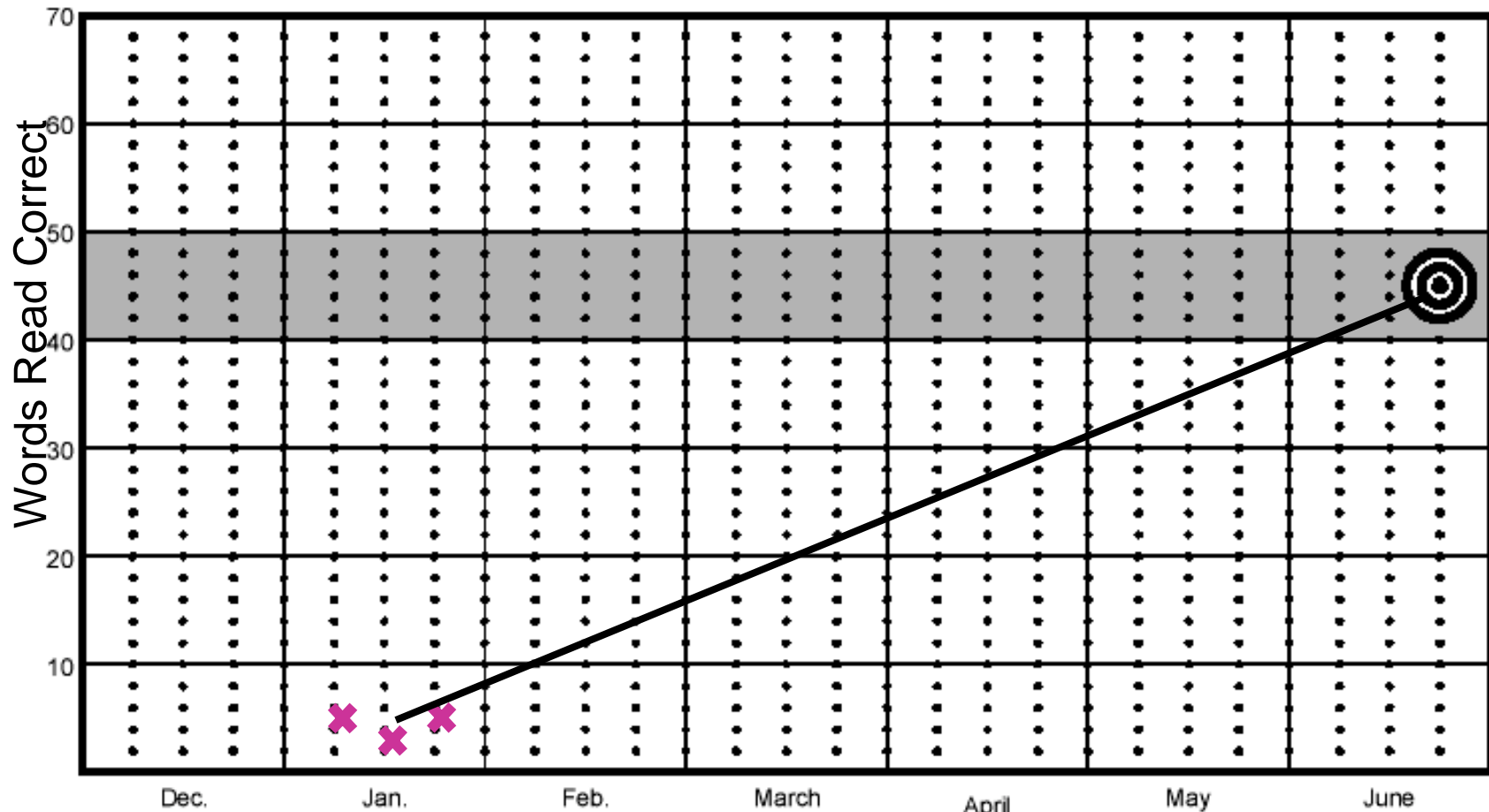
Verify Need for Instructional Support by Retesting with Different Forms Until We Are Reasonably Confident.





# Tia: Validate Need for Support

Verify Need for Instructional Support by Retesting with Different Forms Until We Are Reasonably Confident.

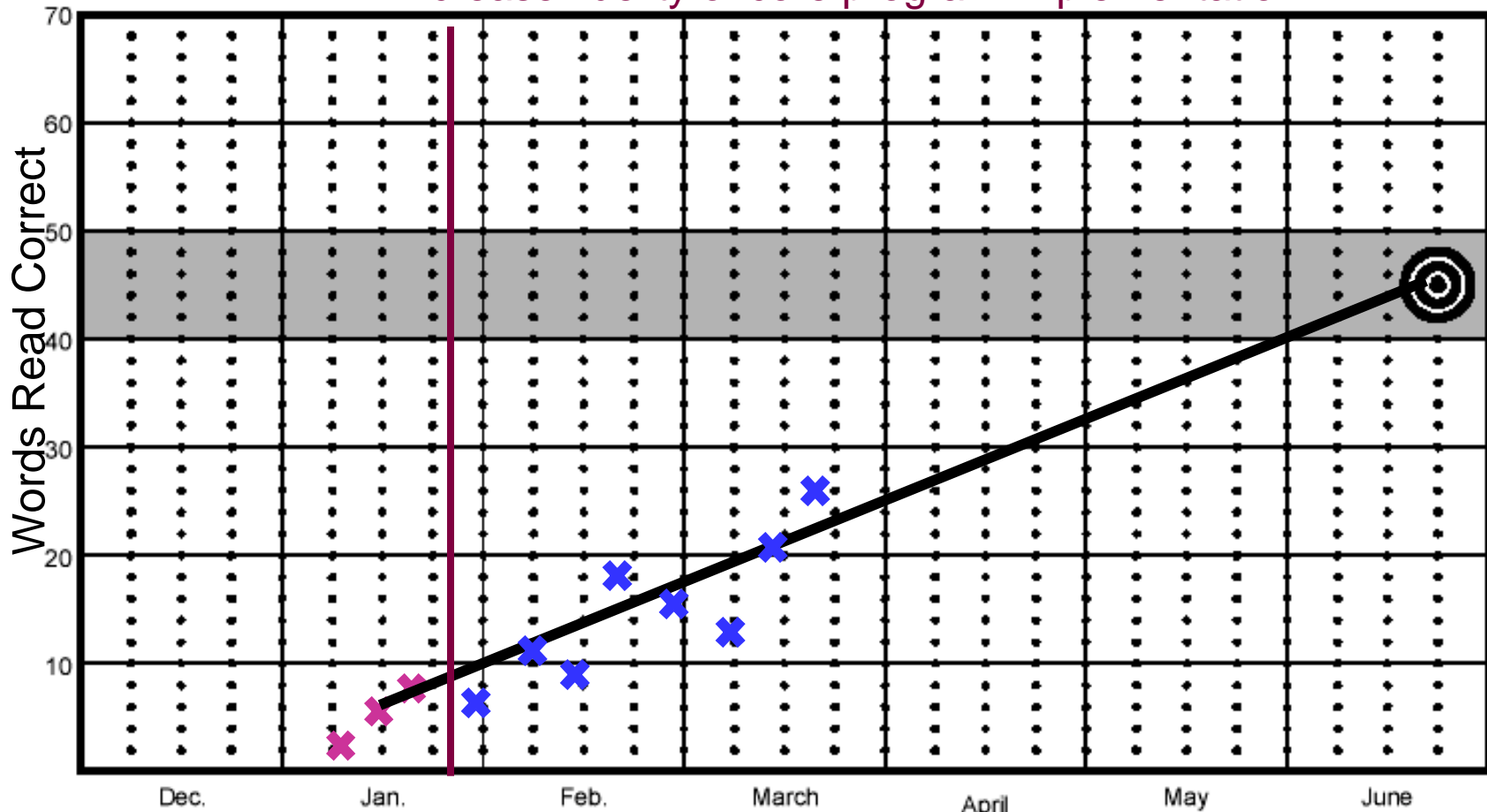


# Using DIBELS in a Systems-Wide RTI Standard Protocol + Problem-Solving Approach

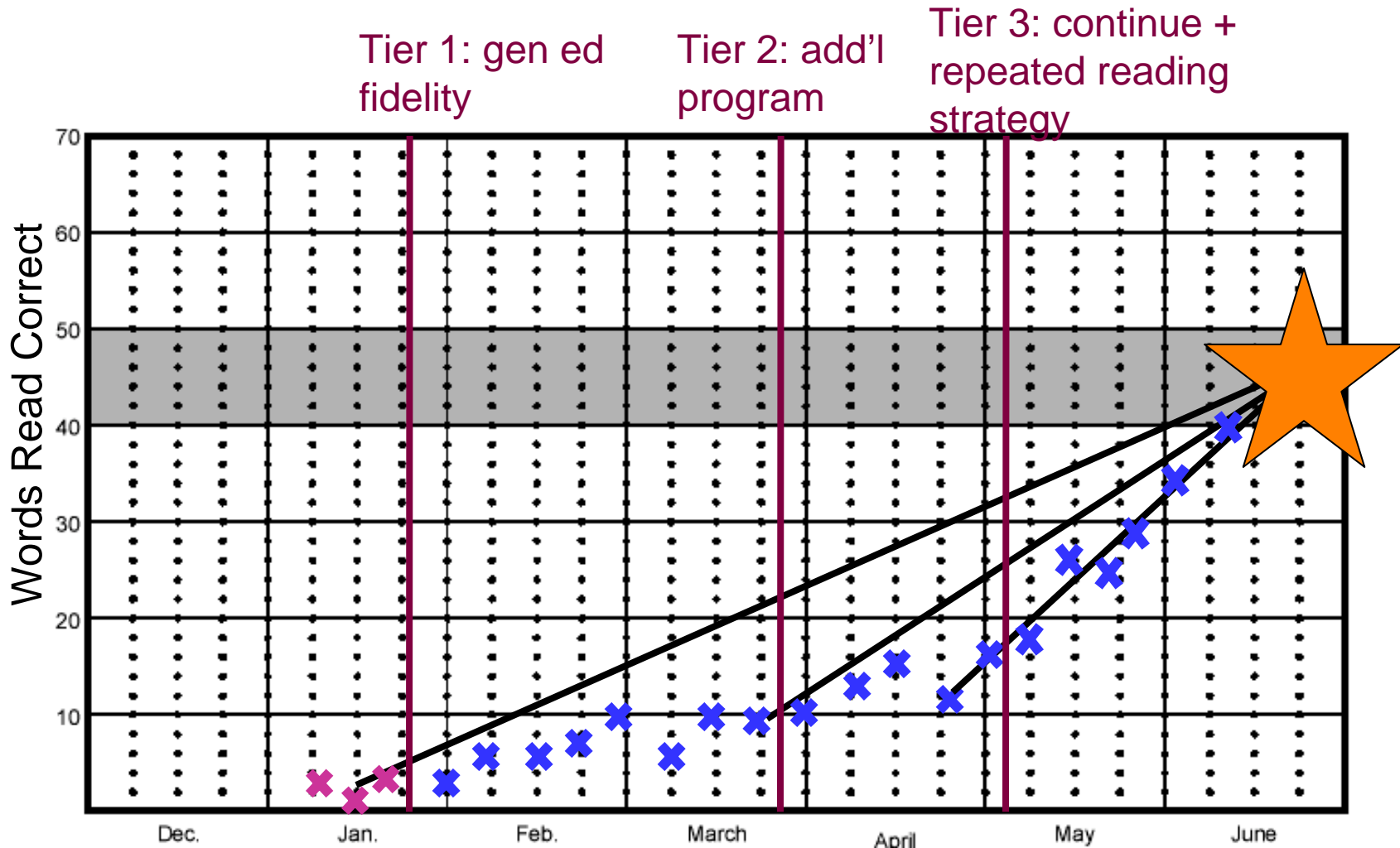
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# Matthew: Evaluating Responsiveness to Intervention

Tier 1 Support: general education consultation to increase fidelity of core program implementation



# Tia: Evaluating Responsiveness to Intervention



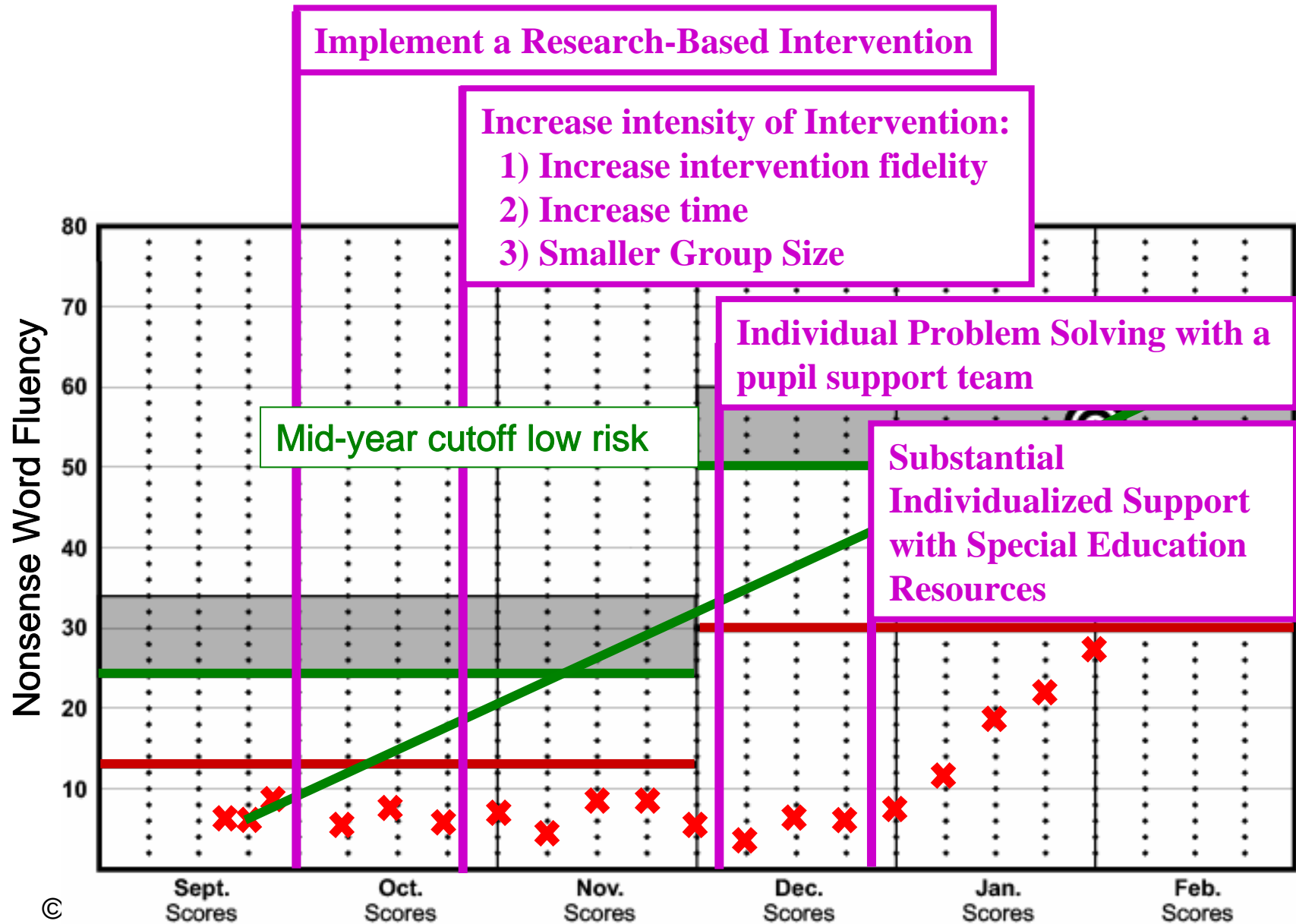
# Using DIBELS in a Systems-Wide RTI Standard Protocol + Problem-Solving Approach

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# Summary: RTI – A Viable Alternative

- An emerging alternative to traditional eligibility models that is encouraged (but not required) by the recent reauthorization of IDEA.
  - “Must permit the use of a process that determines if the child responds to scientific, research-based interventions as part of the evaluation procedures”
- Logic: Serious, sustained, stubborn lack of adequate progress when provided with generally effective instruction/intervention is indicative of a serious learning difficulty requiring special education support.

# Outcomes Driven Model and RTI



## RTI or PORTEI?

- RTI logic requires that the intervention is **effective** – otherwise it indicates a teaching problem rather than a learning problem.
- Requires expertise in instruction and intervention as well as in assessment.
- We need to spend as much time assessing the quality of instruction as we spend assessing the response to the instruction.



## Dynamic Indicators of Basic Early Literacy Skills Summary of Effectiveness by District

District: Test District  
 School: All Schools  
 Date: 2001-2002  
 Step: Beginning of 1st Grade to Middle of 1st Grade

Beginning of First Instructional Recommendation to Middle of First Benchmark Status on NWF	Intensive at Beginning of Year to			Strategic at Beginning of Year to			Benchmark at Beginning of Year to			Benchmark Status on NWF in Middle of First (Totals)
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# CSI Report – Identify Targets of Opportunity

- Core Curriculum and Instruction – Benchmark Students
  - Strength – 95% of Benchmark Students Achieve Goal
  - Relative Strength – Upper Third
  - Needs Support – Middle Third
  - Needs Substantial Support – Lower Third
- Supplemental Instruction – Strategic Support Students
  - Strength – 80% of Strategic Students Achieve Goal
  - Relative Strength – Upper Third
  - Needs Support – Middle Third
  - Needs Substantial Support – Lower Third
- Intensive Intervention – Intensive Support Students
  - Strength – 80% of Intensive Students are Emerging or Achieve Goal
  - Relative Strength – Upper Third
  - Needs Support – Middle Third
  - Needs Substantial Support – Lower Third

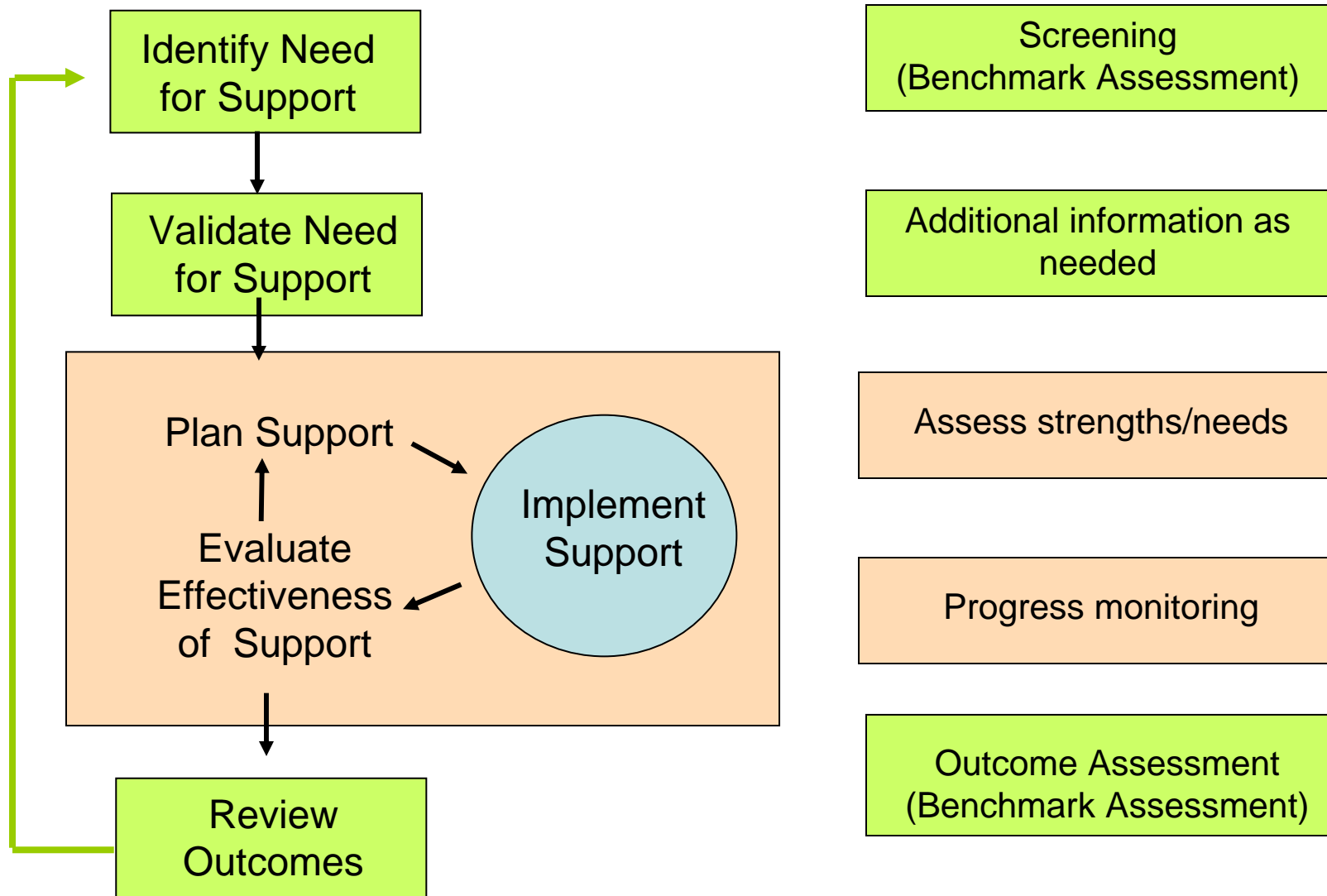
# Meaningful Differences in Effectiveness of Core Curriculum and Instruction

- Schools differ in the percent of Benchmark Students who achieve literacy goals.
- Consistent and robust finding: Odds are in favor of achieving goals for benchmark students, but sometimes more in favor.
- 82% District wide
  - 82% Adams
  - 79% Garfield
  - 78% Jefferson
  - 80% Lincoln
  - 67% McKinley
  - 95% Washington

# RTI or PORTEI?

- Most appropriate in a **prevention-oriented** framework.
- Previous disability models have been **reactive** and not **proactive**.
  - Wasted time, effort, and resources before investing in interventions for children
- Consistent with a continuum of support across general and special education like a *three tier model*.
- Rapidly escalating support.
- Focus on the level of support and resources to make adequate progress.

# Prevention-Oriented Response to Intervention



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