

# Response to Intervention:

## Ode to George Fox

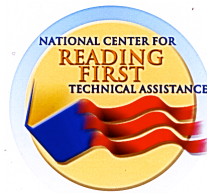
CEC Session (April 7, 2006) Responsiveness to Instruction

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U.S. Department of Education

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## Acknowledgements



**Western Regional Reading First  
Technical Assistance Center  
(WRRFTAC)**

**University of Oregon**



**Center on Teaching and Learning**

**University of Oregon**

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# Websites



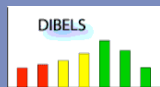
**Institute for the  
Development of Educational Achievement (IDEA)**

<http://idea.uoregon.edu/>



**IDEA Beginning Reading**

<http://reading.uoregon.edu/>



**Dynamic Indicators of  
Basic Early Literacy (DIBELS)**

<http://dibels.uoregon.edu/>

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“All models are wrong, but  
some are useful.”

George Fox

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## Dimensionality of RTI

- Constructs as Categorical Mistakes
- Statutory: IDEA 2004
- Empirical: Underdetermined
- Historical: Caplan & Grunebaum (1967)
- Conceptual & Technical:
  - Identification of condition to be prevented
  - Adoption of established eligibility criteria for services (quantitative, specifying threshold)
  - Statistical documentation of problem frequency & intensity
  - Need for causal modeling and derivation of risk chains for problems and disorders

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### Simeonsson, R. J. (1994). Risk, resilience, & prevention: Promoting the well-being of all children. Baltimore: Paul H. Brookes.

1. Promote child development, learning, well-being + prevent delay or disorder (reduce need for therapeutic, rehabilitative, intensive services).
2. Manifestation of the problem or condition of interest is preventable (in population at large; in subpopulations at increased risk).
3. Ability to identify causal or risk chains (identify specific agents or vectors of disease).
4. Take advantage of lead time in development; capitalize on momentum provided by developmental forces afforded in childhood.
5. Successful prevention programs interdisciplinary in nature & minimize bureaucratic boundaries.
6. Characterized by strong family and community orientation and ready access to wide array of services.
7. Any problem or condition can be defined in functional terms to derive relative risk status.
8. Schools as locus for integrated community-based services.
9. Population-based approach vs. focus on individuals as preventive framework (preventive health care, regular medical check up, fluoridate drinking water).
10. Epidemiological approach: Seek to identify the distribution of a defined condition in the population and identify risk factors.

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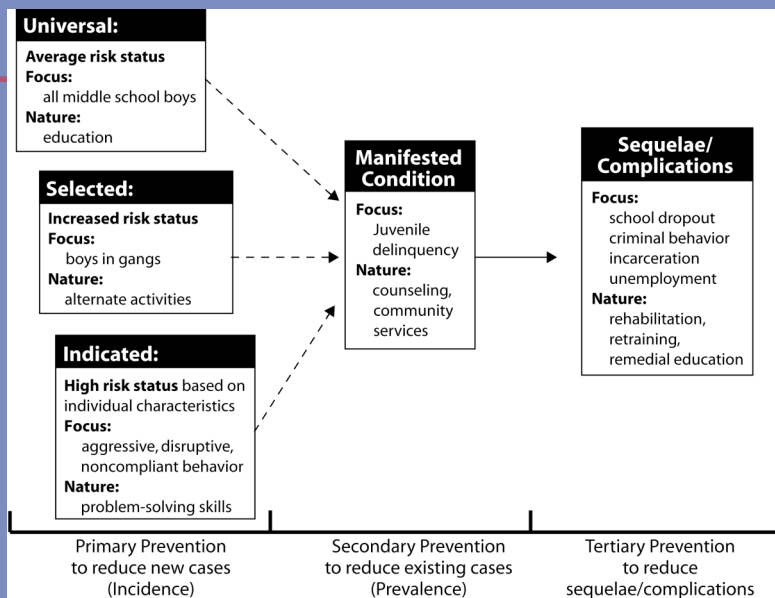
## Purposes of Three-Tier Prevention

**Primary Prevention:** to reduce the number of new cases (incidence) of *severe difficulty learning to read*

**Secondary Prevention:** to reduce the duration of existing cases (prevalence) of *severe difficulty learning to read*

**Tertiary Prevention:** to reduce sequelae and complications from established cases of *severe difficulty learning to read*

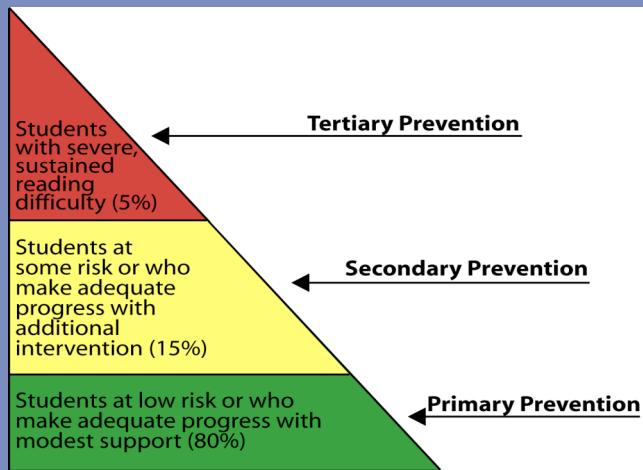
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Simeonsson, R.J. (1994). Promoting children's health, education, and well-being. In R.J. Simeonsson (Ed.), *Risk, resilience, and prevention: Promoting the well-being of all children* (pp. 3-12). Baltimore: Paul H. Brooks.

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## Three-Tier Model of Primary, Secondary, and Tertiary Prevention



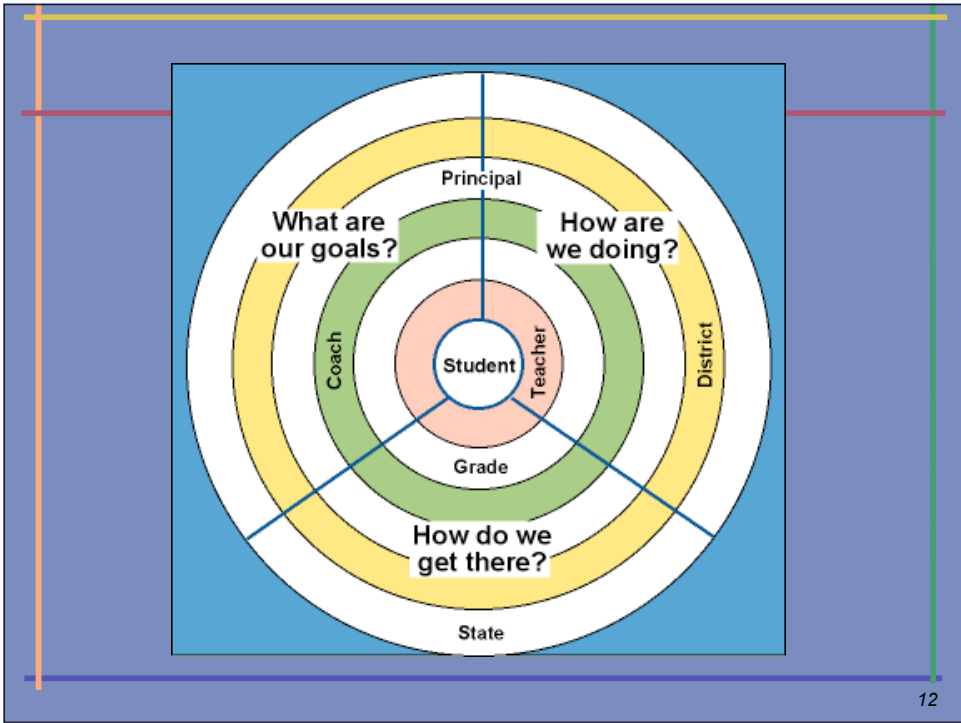
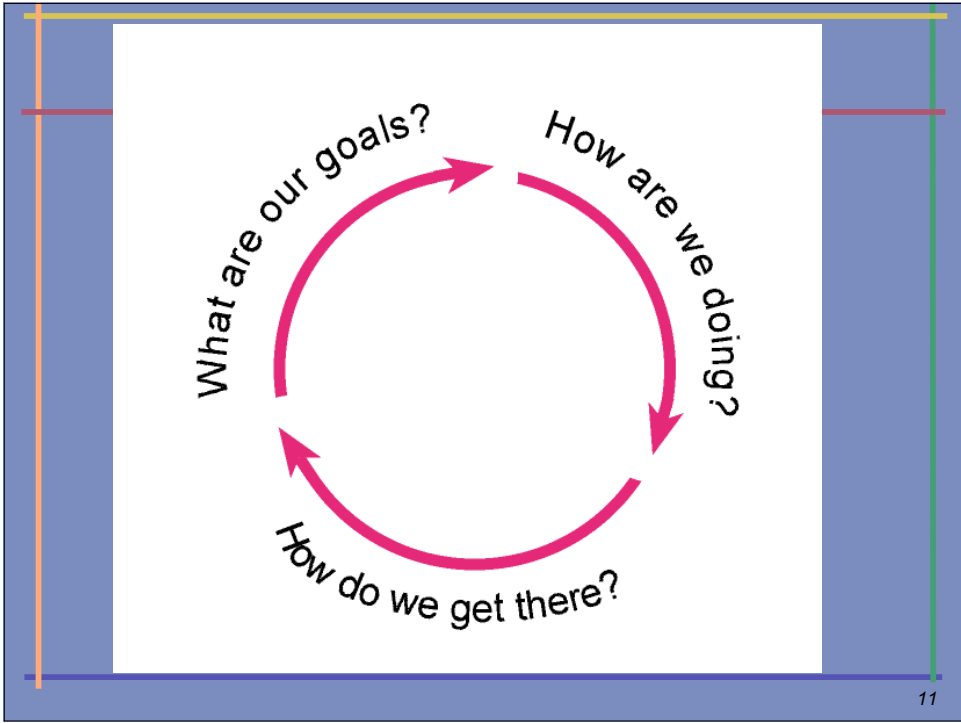
Note. Adapted from Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Emotional and Behavioral Disorders, 4*, 194 - 209.

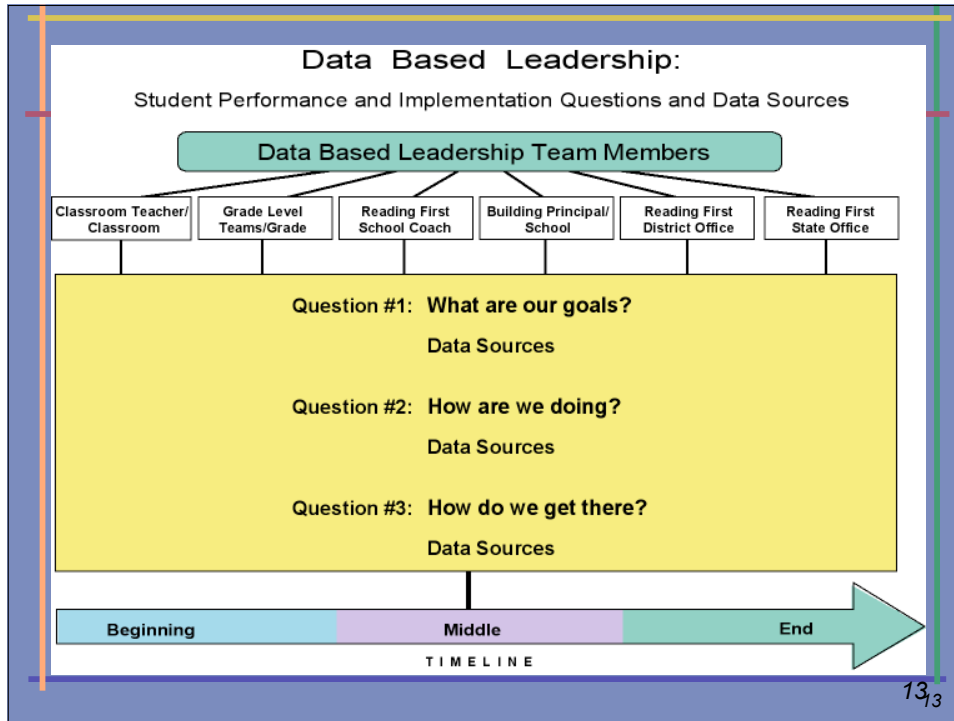
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## Data By the Numbers

- I. Data Purpose: Questions & Stakes
- II. Data Sources
  - Type of data: Purpose of assessment
  - Type of learner: At Risk, Some Risk, Low Risk
  - Data context: Program dependence/independence
- III. Data Schedule
  - Seasonal & Periodic/Incidental/Continuous
- IV. Data Management System
  - IT Systems: Collecting, reporting, analyzing data in real time
- v. Data Leadership
  - Commitment, resource allocation--decision making

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### Student Performance and Implementation Questions and Data Sources

Teacher/Class		
<b>Beginning (Fall)</b>		
Question #1: What are our goals?	Question #2: How are we doing?	Question #3: How do we get there?
Data Source(s):	Data Source(s):	Data Source(s):
<b>Middle (Winter)</b>		
Question #1: What are our goals?	Question #2: How are we doing?	Question #3: How do we get there?
Data Source(s):	Data Source(s):	Data Source(s):
<b>End (Spring)</b>		
Question #1: What are our goals?	Question #2: How are we doing?	Question #3: How do we get there?
Data Source(s):	Data Source(s):	Data Source(s):

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## Organizing Principles

- Differentiated instruction & assessment: Not all children need all types of assessment & instruction.
- Learning enough: Focus on benchmarks to success within a predictive validity framework.
- Learning enough on time: Growth & development is not in equal units per unit of time (Bloom, 1964).
- Clarifying the goals of assessment: Assessment purpose linked to benchmark levels of performance within specified period of time.
- Clarifying the goals of instruction: Performance on specific tasks, at high criterion levels of performance, under highly specified conditions, within a specific period of time given the available resources.

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## Active Ingredients

- Differentiated architecture of instruction: Design, selection, juxtaposition of examples presented.
- Differentiated schedule of instruction: Time allocated to tasks covaries with learner skills & performance.
- Differentiated opportunities to practice: Frequent, brief segments distributed within & across lessons.
- Differentiated criterion levels of performance: Fix high criterion levels of performance (90-100%) on limited or constrained teaching/assessment sets.
- Differentiated reinforcement/management system: Dynamic exchange of responses (pacing of information exchange) contingent on task performance.

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**Alterable Components & Specific Adjustments To Intensify Intervention**

Program Components	Intensity of Interventions				
	(Low) 1	2	3 (Medium)	4	5 (High)
<b>Time and Response Opportunities</b>	Increase attendance and ensure daily instruction--set goals	Increase individual response opportunities within group structure	Increase individual response opportunities outside group structure	Add 1-to-1 tutoring for 10-15 minutes on same daily lesson--high correct response rate	Add another instructional period(double dose) for group on additional lesson
<b>Core Program Efficacy</b>	Research-based core program in place & staff trained	Preteach difficult prerequisite skills/components of core program	Supplement core program with appropriate materials & enhancements	Replace core program with another core program	Implement specially designed program in addition to core program
<b>Program Implementation</b>	Core program lesson taught each day at high level of fidelity	Conduct fidelity check on lesson implementation weekly	Provide additional staff development on target areas	Provide coaching and ongoing support on lesson teaching	Change lesson teacher
<b>Group Size</b>	Placement is appropriate within group	Reduce group size to 4-5 students	Reduce group to 2-3 students	Provide 1-to-1 instruction 1-2 times per week	Provide 1-to-1 instruction only and daily
<b>Coordination of Program &amp; Instruction</b>	Clarify and establish instructional priorities	Establish clear communication across instructors	Provide complementary reading instruction across periods	Establish concurrent reading periods	Meet weekly to examine progress

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Task Components	Intensity of Interventions				
	(Low) 1	2	3 (Medium)	4	5 (High)
<b>Range of Task Examples--Narrow, Medium, Wide</b>	Narrow range and limited number of examples		Medium range and moderate number of examples		Wide range and extensive number of examples
<b>Task Complexity Variation--Easy/ Hard</b>	Easy task--familiar task with 1-2 steps or parts		Medium task with 3-5 steps and parts		Difficult Task with multiple steps, and unfamiliar
<b>Task Schedule Variation--Abbreviated /Extended</b>	Abbreviated task schedule with focus on one response in 1-2 minute period		Medium task schedule with focus on 1-2 response with 5-10 minute period		Extended task schedule with focus on multiple responses > 15 minutes
<b>Task Response Form Variation--Yes/No, Choice, Production</b>	Use of Yes/No response form to each task request		Use choice response form to each task request		Use production response form to each task request
<b>Task Modality Variation--Oral, Motor, Written</b>	Use motor response to point to correct response		Use oral response to identify correct response		Use written response to demonstrate correct response

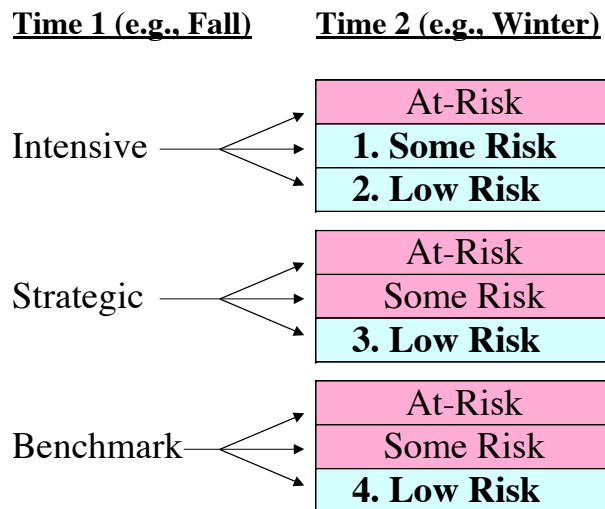
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## Assessment and Curriculum Framework & Dimensions

- **Type of learner:** Advance, On-level, Below-level or Benchmark, Strategic, Intensive
- **Type of assessment:** Screening, progress monitoring, diagnosis, outcomes
- **Type of content:** Essential skills & experiences (RF focus) vs. full range of literacy experiences
- **Frequency of assessment:** End of unit; three times a year; once a month; every other week; weekly, etc.
- **Goal of Assessment:** Program specific assessment vs. program independent assessment.
- **Sensitivity to Instruction:** Sensitive to incremental units of growth on linguistic, alphabetic, phonologic elements that are taught and predictive of later reading success.

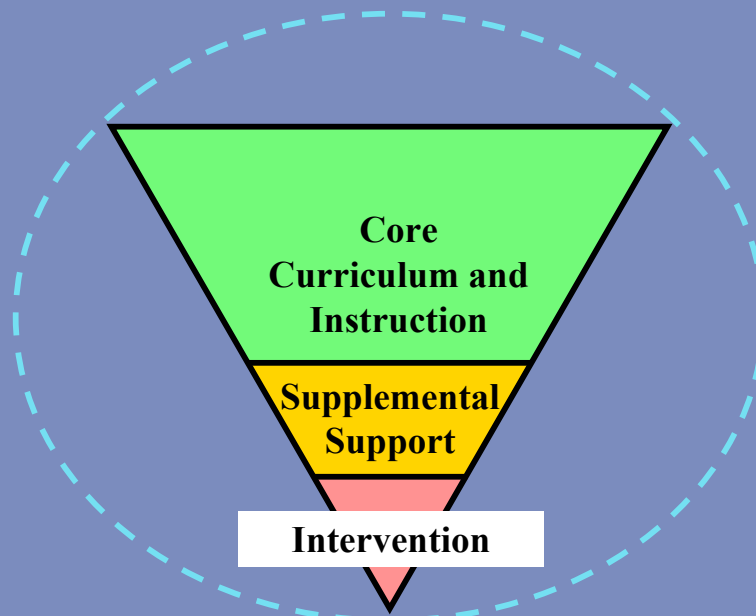
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## 4 Ways to Achieve Adequate Progress



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# Schoolwide System of Instruction & Support



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GRADE LEVEL GRADE LEVEL GRADE LEVEL GRADE LEVEL

## Student Performance and Implementation Questions and Data Sources

### Grade Level Teams/Grade

Beginning (Fall)		
<p><b>Question #1: What are our goals?</b> a. What are the most goals and objectives for students in our grade to accomplish this year in reading to be on track for successful reading outcomes?</p>	<p><b>Question #2: How are we doing?</b> a. How are students in our grade performing at the beginning of the year on the essential components of RF appropriate to our grade? 1. Which students are on track (e.g., at grade level or at Benchmark) for successful reading outcomes and are likely to benefit from the core reading program? 2. Which students will require additional instructional support and are likely to benefit from a <u>supplemental</u> reading program? 3. Which students will require substantial instructional support and are likely to benefit from an <u>intervention</u> program?</p>	<p><b>Question #3: How do we get there?</b> a. What reading programs and materials should I use to teach the full range of students in our grade? b. How can we group students for reading instruction across classrooms? c. How can we schedule adequate instructional time for the different reading groups? d. Who will deliver reading instruction to the full range of students each day? When? For how long?</p>
<p><b>Data Source(s):</b> 1. Simmons &amp; Kame'enui K-3 Curriculum Maps 2. RF State Plan: Grade level goals and objectives</p>	<p><b>Data Source(s):</b> 1. Screening measures specific to RF essential components 2. The following DIBELS reports: a. Class Progress Reports b. School Progress Reports 3. Placement tests specific to core, supplemental, and intervention programs aligned with essential components of RF appropriate to grade level. 4. K-3 CSI Maps (K-3 Core, Strategic, and Intensive Maps) – Beginning to Middle 5. IBR Implementation Checklist: Schoolwide Beginning Reading Model (Simmons et al., 2004) 6. Oregon Reading First Center Program Fidelity Checklist (2004)</p>	<p><b>Data Source(s):</b> 1. A menu of SBRR reading programs (core, supplemental, intervention) that have been reviewed and approved. 2. K-3 CSI Maps (K-3 Core, Strategic, and Intensive) – Beginning to Middle 3. Placement tests specific to core, supplemental, and intervention programs aligned with essential components of RF 4. The following DIBELS reports: a. Class progress reports b. School progress reports 5. IBR Implementation Checklist: Schoolwide Beginning Reading Model (Simmons et al., 2004) 6. Oregon Reading First Center Program Fidelity Checklist (2004)</p>

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GRADE LEVEL GRADE LEVEL GRADE LEVEL GRADE LEVEL			
Student Performance and Implementation Questions and Data Sources			
Grade Level Teams/Grade			
Middle (Winter)			
<p><b>Question #1: What are our goals?</b></p> <p>a. What are the most goals and objectives for students in our grade to accomplish from the middle of the year to the end of the year in reading to be on track for successful reading outcomes?</p> <p><b>Data Source(s)</b></p> <ol style="list-style-type: none"> <li>1. Simmons &amp; Kame'enui K-3 Curriculum Maps</li> <li>2. RF State Plan: Grade level goals and objectives</li> </ol>	<p><b>Question #2: How are we doing?</b></p> <p>a. How are students in our grade performing in the middle of the year on the essential components of RF appropriate to our grade?</p> <ol style="list-style-type: none"> <li>1. Which students are on track (e.g., at grade level or at Benchmark) for successful reading outcomes and are likely to benefit from the core reading program?</li> <li>2. Which students will require additional instructional support and are likely to benefit from a <u>supplemental</u> reading program?</li> <li>3. Which students will require substantial instructional support and are likely to benefit from an <u>intervention</u> program?</li> <li>4. Which students in our grade made adequate reading progress from the beginning of the year to the middle of the year (fall to winter) –             <ol style="list-style-type: none"> <li>a. Started at Benchmark in the fall and were at Benchmark in the Winter</li> <li>b. Started at Strategic in the fall and were at Benchmark in the winter</li> <li>c. Started at Intensive in the fall and were at Strategic or Benchmark in the winter</li> </ol> </li> </ol> <p><b>Data Source(s):</b></p> <ol style="list-style-type: none"> <li>1. Progress monitoring measures specific to RF essential components</li> <li>2. Curriculum embedded progress monitoring measures specific to core, supplemental, or intervention materials</li> <li>2. The following DIBELS reports:             <ol style="list-style-type: none"> <li>a. Class Progress Summary Reports</li> <li>b. School/Grade Progress Reports</li> <li>3. Summary of Effectiveness Reports by Grade</li> <li>4. K-3 CSI Maps (K-3 Core, Strategic, and Intensive Maps) – Winter to Spring</li> <li>5. IBR Implementation Checklist: Schoolwide Beginning Reading Model (Simmons et al., 2004)</li> <li>6. Oregon Reading First Center Program Fidelity Checklist (2004)</li> </ol> </li> </ol>	<p><b>Question #3: How do we get there?</b></p> <p>a. Are the reading programs and materials we use to teach the full range of students in our grade effective?</p> <p>b. Should we re-group students for reading instruction across classrooms?</p> <p>c. Do we need to re-schedule adequate instructional time for the different reading groups?</p> <p>d. Do we need to revise who will deliver reading instruction to the full range of students each day?</p> <p><b>Data Source(s)</b></p> <ol style="list-style-type: none"> <li>1. A menu of SBRR reading programs (core, supplemental, intervention) that have been reviewed and approved.</li> <li>2. K-3 CSI Maps (K-3 Core, Strategic, and Intensive) – Beginning to Middle</li> <li>3. Placement tests specific to core, supplemental, and intervention programs aligned with essential components of RF</li> <li>4. The following DIBELS reports:             <ol style="list-style-type: none"> <li>a. Class progress reports</li> <li>b. School progress reports</li> <li>c. Summary of Effectiveness Reports by Grade</li> </ol> </li> <li>5. Progress monitoring measures specific to RF essential elements</li> <li>6. Curriculum embedded progress monitoring measures specific to RF essential element</li> <li>7. IBR Implementation Checklist: Schoolwide Beginning Reading Model (Simmons et al., 2004)</li> <li>8. Oregon Reading First Center Program Fidelity Checklist (2004)</li> </ol>	23

GRADE LEVEL GRADE LEVEL GRADE LEVEL GRADE LEVEL			
Student Performance and Implementation Questions and Data Sources			
Grade Level Teams/Grade			
End (Spring)			
<p><b>Question #1: What are our goals?</b></p> <p>a. What are the most goals and objectives for students in our grade to accomplish by the end of the year (spring) in each of the five essential components of RF?</p> <p><b>Data Source(s):</b></p> <ol style="list-style-type: none"> <li>1. Simmons &amp; Kame'enui K-3 Curriculum Maps</li> <li>2. RF State Plan: Grade level goals and objectives</li> </ol>	<p><b>Question #2: How are we doing?</b></p> <p>a. How are students in our grade performing at the end of the year on the essential components of RF appropriate to our grade?</p> <ol style="list-style-type: none"> <li>1. Which students are on track (e.g., at grade level or at Benchmark) for successful reading outcomes and are likely to benefit from the <u>core</u> reading program?</li> <li>2. Which students will require additional instructional support and are likely to benefit from a <u>supplemental</u> reading program?</li> <li>3. Which students will require substantial instructional support and are likely to benefit from an <u>intervention</u> program?</li> <li>4. Which students in our grade made adequate reading progress from the middle of the year to the end of the year (winter to spring)             <ol style="list-style-type: none"> <li>a. Started at Benchmark in the fall or winter and were at Benchmark in the spring</li> <li>b. Started at Strategic in the winter and were at Benchmark in the spring</li> <li>c. Started at Intensive in the and were at Benchmark in the spring</li> <li>d. Started at intensive in the winter and were at Benchmark in the spring</li> </ol> </li> </ol> <p><b>Data Source(s):</b></p> <ol style="list-style-type: none"> <li>1. Progress monitoring measures specific to RF essential components</li> <li>2. Curriculum embedded progress monitoring measures specific to core, supplemental, or intervention materials</li> <li>2. The following DIBELS reports:             <ol style="list-style-type: none"> <li>a. Class Progress Summary Reports</li> <li>b. School/Grade Progress Reports</li> <li>3. Summary of Effectiveness Reports by Grade</li> </ol> </li> </ol>	<p><b>Question #3: How do we get there?</b></p> <p>a. Are the reading programs and materials we use to teach the full range of students in our grade effective?</p> <p>b. Should we re-group students for reading instruction across classrooms?</p> <p>c. Do we need to re-schedule adequate instructional time for the different reading groups?</p> <p>d. Do we need to revise who will deliver reading instruction to the full range</p> <p><b>Data Source(s):</b></p> <ol style="list-style-type: none"> <li>1. A menu of SBRR reading programs (core, supplemental, intervention) that have been reviewed and approved.</li> <li>2. K-3 CSI Maps (K-3 Core, Strategic, and Intensive) – Middle to Spring</li> <li>3. Placement tests specific to core, supplemental, and intervention programs aligned with essential components of RF</li> <li>4. The following DIBELS reports:             <ol style="list-style-type: none"> <li>a. Class progress reports</li> <li>b. School progress reports</li> <li>c. Summary of Effectiveness Reports by Grade</li> </ol> </li> <li>5. Progress monitoring measures specific to RF essential elements</li> <li>6. Curriculum embedded progress monitoring measures specific to RF essential element</li> <li>7. IBR Implementation Checklist: Schoolwide Beginning Reading Model (Simmons et al., 2004)</li> <li>8. Oregon Reading First Center Program Fidelity Checklist (2004) of students each day?</li> </ol>	24

## RTI

### On the one-hand...

- Think singularity--single dimension
- Events as independent [need for quantitative measure of the likelihood of a given event]
- Identification
- Individual child stipulated/singularity

### On the other hand...

- Think complexity--multiple dimensions
- Events as dependent [need for quantitative measure of the likelihood of a given event]
- Systemic approach/ response
- Hierarchically & organizationally nested

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## Dimensionality of A “Response”

- An act of responding; constituting a reply or reaction; an activity or inhibition of previous activity of an organism or any of its parts resulting from stimulation; the output resulting from a given input.
- By whom?
- In response to what?
- At what points in time & with what frequency/intensity?
- Under what instructional/assessment conditions?
- At what criterion levels?
- To whom?
- For what purpose?
- For what consequences?

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## Dimensionality of An “Intervention”

- An act of responding; constituting a reply or reaction; an activity or inhibition of previous activity of an organism or any of its parts resulting from stimulation; the output resulting from a given input.
- By whom?
- In response to what?
- When?
- Under what conditions?
- To whom?
- For what purpose?
- For what consequences?

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## Harsh Realities of RTI

- Getting to 100% requires going through the bottom 20%.
- Children who are at risk, face the “tyranny of time” (Kame’enui, 1998).
- Assuming students will ‘catch up’ with practice as usual is not wise. Catching up is a low probability occurrence.
- The bottom 20% will require a very different kind of effort in both the short and long run.

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# Differentiated Instruction

## For Whom @ What Levels?

- Child
  1. Intensive (At Risk)
  2. Strategic (Some Risk)
  3. Benchmark (Low Risk)
- Group
  1. 1-to-1/Tutoring
  2. Small group (3-7)
  3. Large group (>8)
- Class
- Grade
- School
- District

## By Whom @ What Levels?

- General Ed Teacher
- Special Ed Teacher
- Related Services Person
- Teaching Assistant
- Volunteer
- Coach
- Grade Level Teams
- Principal

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# Questions to Consider

- What do we mean by differentiated instruction?
- Differentiated for whom? (All, some, a few: Benchmark, Strategic, Intensive)
- When? (At what points in time--daily, weekly, task-by-task, child response contingent/moment-by-moment)
- Under what conditions? (1-to-1; small group, large group; high teacher supported, scaffolded, independent)
- To what criterion levels of performance or proficiency (fixed criterion levels; trials to criterion)
- Based on what data? (Within-program assessment; independent of program assessment)
- Based on what "grain size" of data (child, class, grade, school, district; task derived, teacher prompted, etc.)

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## Type of Learner x Type of Assessment x Frequency of Assessment Matrix

	Screening	Progress Monitoring (PIA)	Progress Monitoring (PSA)	Diagnostic	Outcome
Advanced	Fall	Fall, Winter, Spring	Unit Test	Not Necessary	Spring
On Level	Fall	Fall, Winter, Spring	Unit Test	Not Necessary	Spring
Below Level	Fall	Once per Month	Weekly	Prior to Intervention	Spring
Significantly Below level	Fall	Once per Week	Weekly	Prior & during intervention	Spring

PIA = Program Independent Assessment  
PSA= Program Specific Assessment

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## Four Kinds/Purposes of Reading Assessment

- **Outcome** - Assessments that provide a bottom-line evaluation of the effectiveness of the reading program.
- **Screening** - Assessments that are administered to determine which children are at risk for reading difficulty and who will need additional intervention.
- **Diagnosis** - Assessments that help teachers plan instruction by providing in-depth information about students' skills and instructional needs.
- **Progress Monitoring** - Assessments that determine if students are making adequate progress or need more intervention to achieve grade level reading outcomes.

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