Problem-Solving and Response to Intervention (RtI): Implications Policies and Practice in Social Work

Problem Solving & Response to Intervention

School Social Work Association of America
Annual Conference
Orlando, Florida
April 19, 2007

Dr. George M. Batsche
Professor and Co-Director
Institute for School Reform
Problem Solving/RtI Statewide Project
School Psychology Program
University of South Florida
Advanced Organizers

- This is a “process” that will take time
- RtI is more about general education than special education
- RtI is a component of problem-solving, not an independent process
- “Response”-data based
- “Intervention”-evidence-based
- Strong basis in statute and rule
Advanced Organizers

• “Response”-assessment
  – Administered frequently
  – Highly sensitive to changes
  – Aligned with intervention focus/outcomes

• “Intervention”-evidence based
  – Aligned with local demographics
  – Delivered with integrity
  – Continuous progress monitoring

• What are the implications for practice and training???
Problem Solving

• A process that uses the skills of professionals from different disciplines to develop and evaluate intervention plans that improve significantly the school performance of students
Problem Solving Process

Define the Problem
Defining Problem/Directly Measuring Behavior

Evaluate
Response to Intervention (RtI)

Problem Analysis
Validating Problem
Ident Variables that Contribute to Problem
Develop Plan

Implement Plan
Implement As Intended
Progress Monitor
Modify as Necessary
Response to Intervention: How Well Are We Doing?

- A systematic and data-based method for determining the degree to which a student has responded to intervention.
- Determined solely through analyzing data
- Begins with using data to IDENTIFY the problem
- Services should intensify for a student as the student response to intervention is below expectations.
- It IS NOT Problem-Solving
Response to Intervention: How Well Are We Doing?

• What do we do when a student has been “placed” in special education but the student’s rate of progress has not changed significantly?

• This has significant implications for special education re-evaluations under the RtI model.
Three Tiered Model of School Supports

**Academic Systems**

Tier 3: Intensive, Individual Interventions
- Individual Students
- Assessment-based
- High Intensity
- Of longer duration

Tier 2: Targeted Group Interventions
- Some students (at-risk)
- High efficiency
- Rapid response

Tier 1: Universal Interventions
- All students
- Preventive, proactive

**Behavioral Systems**

Tier 3: Intensive, Individual Interventions
- Individual Students
- Assessment-based
- Intense, durable procedures

Tier 2: Targeted Group Interventions
- Some students (at-risk)
- High efficiency
- Rapid response

Tier 1: Universal Interventions
- All settings, all students
- Preventive, proactive
Essential Beliefs

- Student performance is influenced most by the quality of the interventions we deliver and how well we deliver them—not preconceived notions about child characteristics.
- Decisions are best made with data.
- Our expectations for student performance should be dependent on a student’s response to intervention, not on the basis of a “score” that “predicts” what they are “capable” of doing.
Essential Components

- Use data to:
  - Evaluate effectiveness of existing curriculum and behavior plans
  - Identify at-risk students EARLY in the risk development process
- Create supplemental instruction/intervention for groups at-risk
- Evaluate effectiveness of supplemental programs
- Create intensive intervention programs for most at-risk
- Evaluate effectiveness of intensive programs
What is the Statutory and Regulatory Foundation for Problem Solving and Response to Intervention?
Contextual Issues Affecting The Problem-Solving Process in General and Special Education

• IDEA Re-Authorization
  – Focus on academic outcomes
  – General education as baseline metric
  – Labeling as a “last resort”
  – Increasing general education options
  – Pooling building-based resources
  – Flexible funding patterns
  – RtI Introduced as option for LD eligibility

• ESEA Legislation-No Child Left Behind
• National Emphasis on Reading
• Evidence-based Interventions
Is It All About Reading?
Yes!

- 52% of IDEA $$ go to LD Programs
- 70% +/- of special education “activities” (e.g., evaluations, staffings, IEPs) related to LD cases
- 94% of students in LD because of reading/language arts
- 46% of IDEA $$ go to improve reading
- Changes in LD Rules will affect the vast majority of special education “activities”
Why Problem-Solving?

BIG IDEAS

- AYP and Disaggregated Data (NCLB) move focus of attention to student progress, not student labels.
- Building principals and superintendents want to know if students are achieving benchmarks, regardless of the students “type”.
- Accurate “placements” do not guarantee that students will be exposed to interventions that maximize their rate of progress.
- Effective interventions result from good problem-solving, rather than good “testing”.
- Progress monitoring is done best with “authentic” assessment that is sensitive to small changes in student academic and social behavior.
Big Ideas (con’d)

- Interventions must be “evidence based” (IDEA/NCLB)
- Response to Intervention (RtI) is the best measure of problem “severity”
- Program eligibility (initial and continued) decisions are best made based on RtI
- Staff training and support (e.g., coaching) improve intervention skills
- “Tiered” implementation improves service efficiency
Status of Reauthorization

- Title: “Individuals with Disabilities Education Improvement Act”
- Passed House in 2003, Senate in 2004
- Signed by President Bush in December.
- IN EFFECT July 1, 2005
- Regulations Effective October 13, 2007
• In general. Notwithstanding section 607(b), when determining whether a child has a specific learning disability as defined in section 602(29), a local educational agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in...
• (B) **Additional authority.** In determining whether a child has a specific learning disability, a local educational agency may use a *process* that determines if the child responds to scientific, research-based intervention.

• Process refers to “Problem Solving Process”
• Responds refers to “Response to Intervention”
(5) SPECIAL RULE FOR ELIGIBILITY DETERMINATION-
In making a determination of eligibility under paragraph (4)(A), a child shall not be determined to be a child with a disability if the determinant factor for such determination is—

(A) lack of appropriate instruction in reading, including in the essential components of reading instruction (as defined in section 1208(3) of the ESEA of 1965);
(B) lack of instruction in math; or
(C) limited English proficiency.
New Regulations: LD

- The child does not achieve adequately for the child’s age or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child’s age or State-approved grade–level standards:

- The child does not make sufficient progress to meet age or State-approved grade-level standards in one or more of the areas identified in paragraph (a)(1) of this section when using a process based on the child’s response to scientific, research-based intervention;
New Regulations: LD

• Data that demonstrate that prior to, or as a part of, the referral process, the child was provided appropriate instruction in regular education settings, delivered by qualified personnel; and

• (2) Data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction, which was provided to the child’s parents.
New Regulations: LD

- If the child has participated in a process that assesses the child’s response to scientific, research-based intervention—
  - (i) The instructional strategies used and the student-centered data collected; and
  - (ii) The documentation that the child’s parents were notified about—
    - (A) The State’s policies regarding the amount and nature of student performance data that would be collected and the general education services that would be provided;
    - (B) Strategies for increasing the child’s rate of learning;
What Does the USDOE Say?

• “The Department does not believe that an assessment of psychological or cognitive processing should be required in determining whether a child has an SLD. There is no current evidence that such assessments are necessary or sufficient for identifying SLD. Further, in many cases, these assessments have not been used to make appropriate intervention decisions.” (IDEIA, 2004, p. 46651)
Implications

• Poor/lack of instruction must be ruled out
• Curricular access blocked by any of the following must be addressed
  – Attendance
  – Health
  – Mobility
• Sufficient exposure to and focus on the curriculum must occur
• Frequent, repeated assessment must be conducted
Research Support for Problem-Solving/Response to Interventions
Validity of Special Education Classification

• Conclusion of the National Research Council’s investigation on the accuracy of special education eligibility and outcomes

• Evaluated on the basis of three criteria:
  – the quality of the general education program
  – the value of the special education program in producing important outcomes for students
  – the accuracy and meaningfulness of the assessment process in the identification of a disability

Heller, Holtzman, & Messick, 1982
Research on the Effectiveness of Special Education

Excedrin Headache #1 for Special Education!
Effectiveness of LD Programs based on Discrepancy Model

- Special education placements tend to stabilize the reading growth of students with reading disabilities rather than accelerate it. (Vaughn, 1998, Moody, 2000)

- Acceleration rates about .04 SD/year. It will take 8 years to move from 5th to 9th percentile (Torgeson, in press; Hanushek, 1998)

- Students who enter special education 2+ years below age mates can be expected to maintain disparity or fall farther behind.

- Effect size for LD programs is .29 (Reschly)

- It’s the nature of the program more than the label that makes the difference.
Research on Problem-Solving/RtI

- Focused on accuracy of referral methods and response to proven interventions

- RtI methods (local comparisons and multiple measurement) were superior to teacher referral for problem accuracy.

- Teachers over-referred male students

- Greater proportion of African American students responded successfully to intervention relative to similarly at-risk Caucasian students. Reduced disproportional placements.

- Early intervention was powerful

- Significant reduction in LD placements

(VanDerHeyden, Witt, and Naquin)
Field-Based Research: Focus and Questions Asked

- How long does it take to implement fully the problem-solving/RtI process?
- What is the impact of PSM/RtI on students from diverse backgrounds?
- What evidence exists to evaluate the satisfaction of teachers and parents with the implementation of PSM/RtI?
Field-Based Research: Focus and Questions Asked

- Is there evidence that the rate of placement in LD programs will accelerate with PSM compared to the discrepancy model?
- What happens when we compare the accuracy of assessment methods used with the PSM/RtI model compared to the discrepancy model?
How long does it take to implement fully the problem-solving/RtI process?

- Evidence from Iowa and Minnesota would suggest that it takes 4-6 years (or more) to complete full implementation. Full implementation includes policy and regulatory change, staff development, and development of building/district-based procedures.
Child-count percentages for students with high-incidence disabilities (1990-2001):
Minneapolis Public Schools

Problem-solving model phase-in began in 1994

Adapted from Marston (2001).
What is the impact of PSM/RtI on students from diverse backgrounds?

• VanDerHeyden, et al. report that students responded positively to the method and that African-American students responded more quickly than other ethnic groups.

• Marston reported a 50% decrease in EMH placements over a 6-year period of time.

• Marston reported a drop over a 3-year period in the percent of African-American students placed in special education from 67% to 55%, considering 45% of the student population was comprised of African-American Students.

• Batsche (2006) reported a significant decrease in the risk indices for minority students.
Percentage of African-American students at each stage of referral process at 41 schools

N=9643
N=9170
N=348
N=416
N=200
N=154
N=184
N=124

1997-98 2000-01
Risk Indices by Year & Race/Ethnicity

Percentage

School Year

Reading First - White
Reading First - Black
Reading First - Hispanic
Comparison - White
Comparison - Black
Comparison - Hispanic
What evidence exists to evaluate the satisfaction of teachers and parents with the implementation of PSM/RtI?

- Swerdlik, et al. conducted a longitudinal study of the impact of PSM/RtI in the FLEXible Service Delivery system in Illinois. Results indicate that both teacher and parent satisfaction with the PSM/RtI method was superior to that of the traditional test-staff-place model.
Teacher Satisfaction at Heartland

**Question 1:** The problem solving process supports teachers in improving the performance of students whose academic skills and behaviors are of concern. This includes the Building Assistance Team or other intervention supports.

<table>
<thead>
<tr>
<th></th>
<th>Gen Ed Teachers (n=390)</th>
<th>Principal (n=31)</th>
<th>Sp Ed Teachers (n=89)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agree</strong></td>
<td>87.3%</td>
<td>96.8%</td>
<td>92.13%</td>
</tr>
</tbody>
</table>

**Question 2:** Problem solving process leading to educational interventions is equally applicable for helping students in general and special education.

<table>
<thead>
<tr>
<th></th>
<th>Gen Ed Teachers (n=390)</th>
<th>Principal (n=31)</th>
<th>Sp Ed Teachers (n=89)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agree</strong></td>
<td>81.0%</td>
<td>96.7%</td>
<td>92.14%</td>
</tr>
</tbody>
</table>

Is there evidence that the rate of placement in LD programs will accelerate with PSM compared to the discrepancy model?

- Marston (2001) reports a 40% decrease in traditional LD evaluations for LD programs.
- VanDerHeyden, et al., report a significant reduction in the rate of placement in LD programs.
- Heartland Early Literacy Project (HELP) reported significant decreases in initial special education placements in grades K (41%), 1 (34%), 2 (25%) and 3 (19%) across a 5 year initial implementation period.
Is there evidence that the rate of placement in LD programs will accelerate with PSM compared to the discrepancy model?

- Vellutino, et al., 1996
  - 67% of students responded to Tier 2-type interventions

- Torgeson, et al., 2001
  - 67% responded well
  - 40% LD students returned to gen ed with no special ed support

- Batsche (2006) reported a 50% decrease in referrals in early intervention schools
Some Overall Referral Trends

![Graph showing referral trends over school years.]

- **Reading First Referred & Pending**
- **Reading First Ineligible**
- **Comparison Referred & Pending**
- **Comparison Ineligible**

School Year vs. Percentage:
- 2002-03
- 2003-04
- 2004-05
What happens when we compare the accuracy of assessment methods used with the PSM/RtI model compared to the discrepancy model?

- VanDerHeyden, et al. reported that RtI methods (local comparisons and multiple measurement) were superior to teacher referral for problem accuracy.

- VanDerHeyden, et al. reported identification of students for eligibility for LD programs was accurate when compared to traditional ability/achievement discrepancy methods.
# Research and PSM/RtI

RtI and Traditional Discrepancy Comparison  
Amanda VanDerHeyden (2005)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Pending</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor RtI-Refer</td>
<td>15</td>
<td>2</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Good RtI-Do Not Refer</td>
<td>9</td>
<td>15</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>17</td>
<td>5</td>
<td>46</td>
</tr>
</tbody>
</table>
So, what ARE the essential components of PSM/RtI and what does the model look like?
Essential Components

• Multiple tiers of intervention service delivery—such as a three-tier model
• Problem-solving method
• An integrated data collection/assessment system to inform decisions at each tier of service delivery
Three Tiered Model of School Supports

**Academic Systems**

**Tier 3: Intensive, Individual Interventions**
- Individual Students
- Assessment-based
- High Intensity
- Of longer duration

**Tier 2: Targeted Group Interventions**
- Some students (at-risk)
- High efficiency
- Rapid response

**Tier 1: Universal Interventions**
- All students
- Preventive, proactive

**Behavioral Systems**

**Tier 3: Intensive, Individual Interventions**
- Individual Students
- Assessment-based
- Intense, durable procedures

**Tier 2: Targeted Group Interventions**
- Some students (at-risk)
- High efficiency
- Rapid response

**Tier 1: Universal Interventions**
- All settings, all students
- Preventive, proactive
How the Tiers Work

- Goal: Student is successful with Tier 1 level of support-academic or behavioral
- Greater the tier, greater support and “severity”
- Increase level of support (Tier level) until you identify an intervention that results in a positive response to intervention
- Tier 2 supports and is integrated with Tier 1
- Tier 3 supports and is integrated with Tier 2
- Continue until student strengthens response significantly
- Systematically reduce support (Lower Tier Level)
- Determine the relationship between sustained growth and sustained support.
Integrating Problem-Solving into the Tiered Delivery System

- High probability hypotheses that address poor performance must be built into the tiers.
- Standard interventions that address these hypothesis must be available in all general education settings
- Progress monitoring methods must be incorporated into general education
Tiers or Levels

- **Tier One**: Examining “Universal” Interventions
  - Questions:
    - How is this student doing compared to other students? *GAP analysis*
    - What percent of other students are achieving district benchmarks? *Effectiveness of instruction*
  - Hypotheses:
    - Ho: Has this student been exposed to an effective learning environment?
    - Ho: Has this student had access to an effective learning environment?
Tiers or Levels

• **Tier One**- Examining “Universal” Interventions
• Assessment:
  – AYP Data
  – State-wide assessments
  – District-wide assessments
  – Attendance data
  – Health data
• Interventions:
  – Improve quality of instruction to all students
  – Improve attendance
Tier 1: Example A

- 82% of Caucasian Students are achieving AYP in reading
- 20% of African American Students are achieving AYP in reading
- African American student is referred for “LD” for a “reading problem”
- Question: Is this student in an “effective instructional environment?”
Tier 1: Example B

- 85% of students in a 4th grade are achieving AYP
- Referred student has been in the school for 4 years and is 2 years below benchmark expectation
- Referred student has been absent an average of 55 days in the past 2 years.
- Question: Has this student been exposed to “effective instruction?”
Tier 1: Example C

- 90% of 3rd grade students are achieving AYP
- Referred student has been in this school since Kgn, has excellent attendance, no significant health history and has received a variety of interventions in reading
- Referred student performance is 50% of peers in reading and at grade level in math
- Question: Has this student been exposed to an “effective learning environment?”
TIER 1: Benchmark/Schoolwide Benchmark/Core Reading Programs:

1. Rigby Literacy (Harcourt Rigby Education, 2000)
5. Open Court (SRA/McGraw-Hill, 2002)
7. Scott Foresman Reading (2004)

Reviewed by: Oregon Reading First
Comprehensive: Addressed all 5 areas and included at least grades K-3
TIER 1: School-Wide Discipline Programs:

Positive Behavior Support
Prosocial Discipline Programs
School-wide Discipline Committee
Attendance Programs
Tiers or Levels

• Tier Two - Examining “Supplemental” Interventions

• Hypotheses:
  – Ho: Student requires additional time for direct instruction
  – Ho: Focus of the curriculum must narrow

• Assessment:
  – DIBELS, CBM, district assessments

• Interventions:
  – Increase AET (90-120-180)
    e.g., K-3 Academic Support Plan
  – Narrow focus to fewer, barrier skills
  – District Supplemental Curriculum
Early Intervening Services

Applying Problem-Solving and RtI to Kindergarten
RtI Format in Kindergarten

- Identify students at moderate/high risk
- Re-assess 1 month later
  - Did levels of risk change?
- Re-assess 1 month later (November)
  - Did levels of risk change?
- Identify moderate/high risk students
- Increase AET
- Re-assess 1 month later
- Increase focus and intensity
- Continue progress monitoring
- Moderate/high risk at end of year
  - Use information to plan first grade intervention process
  - AIP development
  - Methods for significantly increased time and focus
Classroom 13: ISF

Correct Initial Sounds in a Minute

Benchmark (8)
LNF: Classroom 2

Benchmark (8)
ISF: Classroom 2

Benchmark (8)
Characteristics of Tier 2 Interventions

- Available in general education settings
- Opportunity to increase exposure (academic engaged time) to curriculum
- Opportunity to narrow focus of the curriculum
- Sufficient time for interventions to have an effect (10-30 weeks)
- Often are “standardized” supplemental curriculum protocols
TIER 2: Strategic
Strategic/Supplemental Reading Programs:

Early (Soar to) Success (Houghton Mifflin)
Read Well (Sopris West)
Reading Mastery (SRA)
Early Reading Intervention (Scott Foresman)
Great Leaps (Diamuid, Inc.)
REWARDS (Sopris West)
Ladders to Literacy (Brookes)
Read Naturally
Peer Assisted Learning Strategies (PALS)
TIER 2: Strategic
Strategic/Supplemental Behavior Programs:

- Small Group SST
- Anger Control Training
- Peer/adult mentoring program
- Tiered discipline program (e.g., positive rehearsal, time out)
Tier 2: What is a “Good” Response to Intervention?

• Good Response
  – Gap is closing
  – Can extrapolate point at which target student will “come in range” of peers--even if this is long range

• 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.
Tiers or Levels

• Tier **Three**: Examining “Intensive” Interventions
• Hypotheses: Focus on child-specific issues
• Assessment:
  – DIBELS, CBE, Diagnostic Assessments
• Interventions:
  – Address verified hypotheses
Characteristics of Tier 3 Interventions

- Developed from individualized student problem-solving
- Assumption is that more of the “problem” lies within the student
- Goal is to find successful interventions first
- Based on “intensity” of the interventions required for student success, determination is made about eligibility for special education.
- Should comprise 4-5% of student population
- Criteria for “Good” RtI is same as Tier 2
TIER 3: INTENSIVE Reading Programs

Corrective Reading (SRA)

Language! (Sopris West)

Wilson Reading System Reading Mastery

Earobics (phonics/phonemic awareness; Cognitive Concepts)

Great Leaps/ Read Naturally (Fluency)

REWARDS (Fluency, Comp. and Vocab. in Plus Program)

Soar to Success (comp.)
TIER 3: INTENSIVE Behavior Programs

- Individual counseling/therapy
- Individual Behavior Plan
- Rapid Response
- In-school alternative education
- Frequent, daily mentoring
Tier 3: Comprehensive and Intensive Interventions
Individual Students or Small Group (2-3)
Reading: Scholastic Program, Reading Mastery, ALL, Soar to Success, Leap Track, Fundations

Tier 3: Intensive Interventions
Individual Counseling
FBA/BIP
Teach, Reinforce, and Prevent (TRP)
Assessment-based
Intense, durable procedures

Tier 2: Strategic Interventions
Students that don’t respond to the core curriculum
Reading: Soar to Success, Leap Frog, CRISS strategies, CCC Lab Math: Extended Day
Writing: Small Group, CRISS strategies, and “Just Write Narrative” by K. Robinson

Tier 2: Targeted Group Interventions
Some students (at-risk)
Small Group Counseling
Parent Training (Behavior & Academic)
Bullying Prevention Program
FBA/BIP Classroom Management Techniques, Professional Development
Small Group Parent Training, Data

Tier 1: Core Curriculum
All students
Reading: Houghton Mifflin
Math: Harcourt
Writing: Six Traits Of Writing
Learning Focus Strategies

Tier 1: Universal Interventions
All settings, all students
Committee, Preventive, proactive strategies
School Wide Rules/ Expectations
Positive Reinforcement System (Tickets & 200 Club)
School Wide Consequence System
School Wide Social Skills Program, Data (Discipline, Surveys, etc.) Professional Development (behavior)
Classroom Management Techniques, Parent Training

Three Tiered Model of School Supports:
Anclote Elementary-Pasco County
Problem Solving Process

Define the Problem
Defining Problem/Directly Measuring Behavior

Problem Analysis
Validating Problem
Ident Variables that Contribute to Problem
Develop Plan

Implement Plan
Implement As Intended
Progress Monitor
Modify as Necessary

Evaluate
Response to Intervention (RtI)
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
Data Required for Problem Identification

- Current Level of Functioning
- Benchmark/Desired Level
- Peer Performance
- GAP Analysis
Example - ORF

- Current Level of Performance:
  - 40 WCPM

- Benchmark
  - 92 WCPM

- Peer Performance
  - 88 WCPM

- GAP Analysis: 92/40 = 2+X difference SIGNIFICANT GAP

- Is instruction effective? Yes, peer performance is at benchmark.
Example- Behavior

- Current Level of Performance:
  - Complies 35% of time

- Benchmark (set by teacher)
  - 75%

- Peer Performance
  - 40%

- GAP Analysis: $40/35 = 1.1X$ difference   NO SIGNIFICANT GAP

- Is behavior program effective? No, peers have significant gap from benchmark as well.
Data-Based Determination of Expectations

• Data- Current Level of Performance
• Data- Benchmark Level
• Date- # of Weeks to Benchmark
• Calculate-
  – Difference between current and benchmark level
  – Divide by # Weeks
  – Result: Rate per week of growth required
• REALISTIC? Compare to Peer Group Rate
Data-Based Determination of Expectations: Academic

- Benchmark Level: 90 WCPM
- Current Level: 40 WCPM
- Difference: 50 WCPM
- Time to Benchmark: 20 Weeks
- Rate of Growth Required: 
  - $\frac{50}{20} = 2.5$ WCPM
- Peer Group Rate = 2.0 wcpm growth
- REALISTIC? Not unless you increase AET
Data-Based Determination of Expectations: Behavior

- Same as academic calculations, EXCEPT:
  - Benchmark is fixed so you do not have peer rate
  - Level of reality must await RtI to initial interventions.
  - Research support for rates of improvement for the type of replacement behavior desired.
  - Don’t forget to consider ecological variables when using research
    - Number of students in class
    - Level of support for intervention implementation
    - Frequency of progress monitoring
Problem Analysis

• Why is problem occurring?
• Facilitate Problem Analysis
  – Skill vs performance
  – Develop Hypotheses
  – Which ones supported by data?
  – Prioritize

Note: Specific Hypotheses Important—must lead to interventions. Reinforce data link
Integrated Data System

Nine Characteristics:

• Directly assess the specific skills within state and local academic standards.
• Assess marker variables that lead to the ultimate instructional target.
• Are sensitive to small increments of growth over time.
• Can be administered efficiently over short periods.
Integrated Data System

• May be administered repeatedly.
• Can readily be summarized in teacher-friendly formats/displays.
• Can be used to make comparisons across students.
• Can be used to monitor an IEP over time.
• Have direct relevance to the development of instructional strategies related to need.
Criteria for Special Education Eligibility

• Significant gap exists between student and benchmark/peer performance
• The Response to Intervention is insufficient to predict attaining benchmark
• Student is not a functionally independent learner
• Complete comprehensive evaluation
What is Necessary for PSM/RtI to Work for Students and Districts?

• *Early intervention* Use Kgn DIBELS and similar assessments for this purpose

• *Access to and Use of Data* Student data is the most accurate means of referring students for assistance and making judgments about intervention effectiveness

• *Accurate Tier 1 Decisions* Special education cannot “cure” large-scale pedagogical problems one student at a time
Words Correct Per Min
Benchmark

School Weeks
Sept  
Oct  
Nov  
Dec  
Jan  
Feb  

LISA

50
0
10
20
30
40
50
60
70
80
90
100

50

 Benchmark
Decision Model at Tier 1- General Education Instruction

• **Step 1: Screening**
  - ORF = 50 wcpm, fall benchmark for some risk = 44 wcpm
  - Comprehension skills are judged as at levels equal to ORF by her teacher
  - Is this student at risk?

Current Gen Ed Instruction is Working

Continue Tier 1 Instruction

Lisa

No

Yes

Move to Tier 2: Strategic Interventions
Rita

- Second grade student
- Beginning of school year
- Regular Education
- Scores at 20 wcpsm in second grade material
- Teacher judges (based on in-class observation/evaluation) comprehension to not be substantially different from ORF
Decision Model at Tier 1-
General Education Instruction

• Step 1: Screening
  • ORF = 20 wcpm, fall benchmark for some risk = 44 wcpm
  • Comprehension deficits in all 4 of 5 areas are noted
  • Current Gen Ed Instruction is **NOT** Working
  • Is this student at risk?

- **No**
- **Yes**

Rita

Continue Tier 1 Instruction

Move to Tier 2: Strategic Interventions
Decision Model at Tier 2 - Strategic Interventions & Instruction

- Supplemental, small group instruction (3-4 students with similar skill levels)
- Standard protocol intervention
- 3x per week, 30 minutes each
- Team selects PALS (Peer Tutoring Strategy)
- Implemented by 2 different available instructional personnel
- Implemented for 8 weeks
- Progress monitoring once every 2 weeks
Rita- Tier 2

Tier 2: Strategic - PALS

Trendline = 1.85 words/week

Aimline = 1.50 words/week
Decision Model at Tier 2 - Strategic Intervention & Instruction

- ORF = 34 wcpm, winter benchmark (still 8 weeks away) for some risk = 52 wcpm
- Target rate of gain over Tier 1 assessment is 1.5 words/week
- Actual attained rate of gain was 1.85 words/week
- Gains above benchmark in 4 of 5 comprehension areas
- Student on target to attain benchmark
- Step 2: Is student responsive to intervention?

Move to Tier 3: Intensive Interventions
Steven

- Second grade student
- Beginning of school year
- Regular Education
- Scores at 20 wcpm in second grade material
- Teacher judges (based on in-class observation/evaluation) comprehension to not be substantially different from ORF
Decision Model at Tier 1 - General Education Instruction

- **Step 1: Screening**
  - ORF = 20 wcpm, fall benchmark for some risk = 44 wcpm
  - Comprehension screen also shows deficits in all 5 areas
  - Current Gen Ed Instruction is **NOT** Working
  - Is this student at risk?
    - No
      - Continue Tier 1 Instruction
    - Yes
      - Move to Tier 2: Strategic Interventions
Decision Model at Tier 2 - Strategic Interventions & Instruction

- Supplemental, small group instruction in Rita’s group (3-4 students with similar skill levels)
- Standard protocol implementation
- 3x per week, 30 minutes each
- Team selects PALS (Peer Tutoring Strategy)
- Implemented by 2 different available instructional personnel
- Implemented for 8 weeks
- Progress monitoring once every 2 weeks
Tier 2: Strategic -
PALS

Aimline = 1.50 words/week

Trendline = 0.55 words/week
Decision Model at Tier 2 - Strategic Intervention & Instruction

Step 2: Is student responsive to intervention?

- ORF = 24 wcpm, winter benchmark (still 8 weeks away) for some risk = 52 wcpm
- Target rate of gain over Tier 1 assessment is 1.5 words/week
- Actual attained rate of gain was 0.55 words/week
- Below comprehension benchmarks in 4 of 5 areas
- Student **NOT** on target to attain benchmark
- Is student responsive to intervention at Tier 2?

- Yes
- No

Move to Tier 3: Intensive Interventions
Decision Model at Tier 3- Intensive Interventions & Instruction

• Supplemental, 1:3, pull-out instruction
• Individualized Problem-Solving, Targeted Instruction
• Specific decoding and analysis strategies
• Emphasis on comprehension strategies
• 5x per week, 30 minutes each
• Implemented by 2 different available instructional personnel
• Implemented for 8 weeks
• Progress monitoring once every week
Steven

Tier 2: Strategic - PALS

Tier 3: Intensive - 1:1 instruction, 5x/week, Problem-solving Model to Target Key Decoding Strategies, Comprehension Strategies

Aimline = 1.50 words/week

Trendline = 0.232 words/week
Decision Model at Tier 3- Intensive Intervention & Instruction

- Step 3: Is student responsive to intervention at Tier 3?
  - ORF = 45 wcpm, winter benchmark (still 4 weeks away) for some risk = 52 wcpm
  - Target rate of gain over Tier 2 assessment is 1.5 words/week
  - Actual attained rate of gain was 2.32 words/week
  - At or above comprehension benchmarks in 4 of 5 areas
  - Student on target to attain benchmark
  - Step 3: Is student responsive to intervention?
    - Move student back to Strategic intervention
    - Continue monitoring or return to Tier 2

Move to Sp Ed Eligibility Determination

Steven

Yes

No
Bart

- Second grade student
- Beginning of school year
- Regular Education
- Scores at 20 wcpm in second grade material
- Teacher judges (based on in-class observation/evaluation) comprehension to not be substantially different from ORF
Step 3: Is student responsive to intervention at Tier 3?

- ORF = 31 wcpm, winter benchmark (still 4 weeks away) for some risk = 52 wcpm
- Target rate of gain over Tier 2 assessment is 1.5 words/week
- Actual attained rate of gain was 0.95 words/week
- Below comprehension benchmarks in all areas
- Student **NOT** on target to attain benchmark

Decision:

- Yes: Continue monitoring or return to Tier 2
- No: Move to Sp Ed Eligibility Determination

Bart
Behavioral Case Examples
Tier I (Universal) and Tier II (Supplemental) Interventions

Victor D. 7

- Grade-Level Social Skill Training
- Grade-Level Social Skill Training + Supplemental Group
- Grade-Level Social Skill Training + Supplemental Group + Self-Monitoring

Rate of change to meet benchmark in 18 weeks is +3% a week

- Peer Group
- Target Student
- Aimline
- Trendline

*Rate of change required each week for target student to reach benchmark is (+3%)*
Intervention Implementation

- Find additional time
- Ensure that supplemental and intensive interventions are integrated with core instruction/behavior plan
- Intervention support available
  - Frequent meetings with teacher(s)
  - Data review
  - Review intervention steps
Intervention Implementation

• Identify number of intervention support personnel available
• Identify the number of students needing supplemental and intensive support
• See if the ratios make sense!
• Example
  – 600 students, 300 making benchmarks
  – 30 teachers, 6 support personnel
  – 30 teachers for 300 students
  – 6 support staff for 300 students
  – DOES NOT MAKE SENSE
HOW DO WE DOCUMENT THIS?
## Problem-Solving Process

<table>
<thead>
<tr>
<th>Student</th>
<th>Information</th>
<th>Reasons</th>
<th>Current</th>
<th>Recommended</th>
</tr>
</thead>
</table>
| **Name:** Lee Miller | **Strengths:** 1. Math Problem-Solving and Reasoning 2. Social Skills 3. Effort | Student lacks letter-sound knowledge. Student lacks automaticity with sight words. Student reads word-for-word. Student needs more time and practice. | **Current Levels:**  
Student: HM EFG  
DIBELS NWF 20  
DIBELS ORF 15  
Peers: HM HI  
DIBELS NWF 52  
DIBELS ORF 42  
Expected/Benchmark: HM HI  
DIBELS NWF 50  
DIBELS ORF 44 | **Goal Levels:** [in 6 weeks]  
Student: HM HI  
DIBELS NWF 32  
DIBELS ORF 27  
Expected/Benchmark: HM HI  
DIBELS NWF 50  
DIBELS ORF 44  
**FOLLOW-UP DATE:** 11/05/06 |
| **Grade:** 2 (BOY) | **Concerns:** 1. Reading - Phonics, Fluency, Comprehension 2. Writing - Conventions, Expression | | | |
| **DOB:** 10/23/96 | **Interventions:**  
Name: Core Program Early Success  
Frequency: 5x/wk, 90 min  
3x/wk, 30 min  
**Interventions:**  
Name: Core Program Early Success  
Frequency: 5x/wk, 90 min  
5x/wk, 30 min  
5x/wk, 15 min  
5x/wk, in Lit. Centers | | | |
| **Retained?** Y | **Name:** Lee Miller | | | |
| **ESE?** No | **Grade:** 2 (BOY) | **Interventions:**  
Name: Core Program Early Success  
Frequency: 5x/wk, 90 min  
3x/wk, 30 min  
**Interventions:**  
Name: Core Program Early Success  
Frequency: 5x/wk, 90 min  
5x/wk, 30 min  
5x/wk, 15 min  
5x/wk, in Lit. Centers | | | |
IDEIA Comprehensive Evaluation

- Problem Identification
  - Oral Expression
  - Listening Comprehension
  - Written Expression
  - Basic Reading Skill
  - Reading Fluency Skills
  - Reading Comprehension
  - Mathematics Calculation
  - Mathematics Problem-Solving
IDEIA Comprehensive Evaluation

- Relevant behavior noted during the observation and relationship of Bx to academic functioning
  - *Data from required observation*
IDEIA Comprehensive Evaluation

- The child does not achieve adequately for the child’s age or to meet state-approved grade-level standards
  - GAP Analysis from Tier 1

AND
IDEIA Comprehensive Evaluation

• The child does not make sufficient progress to meet age or to meet state-approved standards when using a process based on the child’s response to scientific, research-based intervention
  – *RtI Data from Tiers 2 and 3*

OR
IDEIA Comprehensive Evaluation

- The child exhibits a pattern of strengths and weaknesses in performance, achievement or both, relative to age, state-approved grade level standards or intellectual development that is determined by the group to be relevant to the identification of a SLD, using appropriate assessments
  - Differential Academic Performance Levels

NOTE: Requirement for a severe discrepancy between ability and achievement was removed.
IDEIA Comprehensive Evaluation

- The findings are not primarily the result of:
  - Sensory or Motor Disability
  - Mental Retardation
    - **Assess Adaptive Behavior First**
  - Emotional Disturbance
    - *Data from observation*
    - *Observation and performance data*
  - Cultural Factors
    - *AYP Data for Race (NCLB)*
    - *Comparative AYP for Culture (Local Norms)*
  - Environmental or Economic Disadvantage
    - *AYP Data for Low SES*
  - Limited English Proficiency
    - *AYP Data for LEP*
How Do We Do This Safely?

- Plan Ahead
- Early Identification
- Early Intervention
- Use Data
- Continuous Progress Monitoring
- Standard Intervention Protocols
- Evidence-Based Interventions
- Technology
How Long Will It Take to Implement this Effectively?

• 3-6 years
• Take it one step (e.g., skill) at a time.
• Start with young students (Kgn/DIBELS)
• Consider Tier 1 issues
• Create Tier 2 options with existing staff and resources
• Develop a 5 year PDP for staff
• Ease their job with social support and technology
• Use networks-avoid “reinventing” the wheel.
Stages of Implementing Problem-Solving/RtI

• **Consensus**
  – Belief is shared
  – Vision is agreed upon
  – Implementation requirements understood

• **Infrastructure Development**
  – Training
  – Tier I and II intervention systems
    • E.g., K-3 Academic Support Plan
  – Technology support
  – Decision-making criteria established

• **Implementation**
The Process of Systems Change

- Until, and unless, **Consensus** (understanding the need and trusting in the support) is reached no support will exist to establish the **Infrastructure**. Until, and unless, the **Infrastructure** is in place **Implementation** will not take place.

- A fatal flaw is to attempt **Implementation** without **Consensus** and **Infrastructure**

- Leadership must come both from the Principal and from the educators in the building.
Personnel Critical to Successful Implementation

• District-Level Leaders
• Building Leaders
• Facilitator
• Teachers/Student Services
• Parents
• Students
Role of District Leaders

- Give “permission” for model
- Provide a vision for outcome-based service delivery
- Reinforce effective practices
- Expect accountability
- Provide tangible support for effort
  - Training
  - Coaching
  - Technology
  - Policies
Role of the Principal

- Sets vision for problem-solving process
- Supports development of expectations
- Responsible for allocation of resources
- Facilitates priority setting
- Ensures follow-up
- Supports program evaluation
- Monitors staff support/climate
Role of the Facilitator

- Ensures pre-meeting preparation
- Reviews steps in process and desired outcomes
- Facilitates movement through steps
- Facilitates consensus building
- Sets follow-up schedule/communication
- Creates evaluation criteria/protocol
- Ensures parent involvement
Role of Participants

- Review Request for Assistance forms prior to meeting
- Complete individual problem-solving
- Attitude of consensus building
- Understand data
- Research interventions for problem area
Role of Parent

- Review Request for Assistance form prior to meeting
- Complete individual problem solving
- Prioritize concerns
- Attitude of consensus building
Student Involvement

- Increases motivation of student
- Reduces teacher load
- Teaches self-responsibility
Impact on Leaders: A Change in Focus

- Student progress, not labels are most important
- All students compared to general education expectations
- All students affect AYP
- A student’s response to intervention is the most important data
- Academic Engaged Time is the currency of problem-solving
- Training and coaching must be focused on PSM
- Increase the use of technology
- Interventions must be evidence-based
Staff Support

• Risk-free or risky environment?
• Expectations may be most important factor
• “Alternative” not “Less”
We have an exciting opportunity before us
We have many of the tools we need to move ahead
A broad base of experimentation is occurring across the country
We can set direction for where we go next
The critical difference between places where change takes hold and flourishes and where it founders, is LEADERSHIP