Using Problem-Solving and Response to
Intervention to Develop, Implement and
Evaluate Effective Interventions for Students

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Dr. George M. Batsche, Co-Director
Student Support Services Project
Florida Department of Education
School Psychology Program
University of South Florida

Rationale for the Initiative

- Student progress has become the primary concern of the Florida Department of Education
- State-adopted Continuous Improvement Model (CIM)
- Each school in FL is "graded" (A-F) and accountability is public
- The legislature is very "hands on" and passed legislation for such practices as "mandatory retention" and academic improvement plans (AIPs) for students who do not make adequate progress.

Rationale for the Initiative

- Statewide universal interventions for Reading First, Positive Behavior Support, and Early Intervention exist but lack integration.
- The PSM can serve to:
  - Facilitate the integration of universal interventions
  - Provide a process to develop strategic and intensive interventions
  - Monitor and document student progress (RtI)
  - Increase the speed and efficiency of services that improve student performance

Florida PSM: Basic Assumptions

- **Build** on existing universal intervention and assessment practices
- **Respect** "behavioral regularity" concept:
  - Use as many of the existing skills and structures as possible
  - Introduce as few "new" practices as possible
- **Use** existing statewide training and technical assistance support networks to deliver the model
- **Secure** senior state-level support through rules changes and financial and practice incentives

Florida PSM: Conceptual Model

- Integrate with Continuous Improvement Model adopted by Florida Department of Education

- 3-4 Tiered Model of Service Delivery and Decision-Making

- 4-Step Problem-Solving Method

Why Problem-Solving and RtI ?
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" assessments that are 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

Individuals With Disabilities Education Improvement Act

- **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** …

Individuals with Disabilities Education Improvement Act

- (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.**

- **The "Process" is the Problem-Solving Process**

- **"Responds" to …intervention is RtI**

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(5) SPECIAL RULE FOR ELIBIGILITY 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.

So What Is Special Education?

- Characteristics AND Need (IDEA 04)
- Instructional and Related Services Necessary to Profit from Education
- Supplements General Education
  - Note: Does not supplant-particularly LD
  - "Unified" system of Education
- Funds (really??) Instructional and Related Services When Those Reach a Certain Level of Intensity
- What is "Special?" Intensity and Focus

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"

Discrepancy vs Problem Solving

- Focus on interventions (not test scores)
  - Low and high ability students respond equally well to phonemic awareness and phonics interventions.

- Assessment linked to developing and monitoring the effectiveness of interventions (not to diagnoses or categories)

- Balance between needs/resources (not strictly to eligibility)

- Change process (not a "fix")

- Student outcome-based, not placement-based (What students DO is important, not what students are CALLLED)

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, 198, 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.
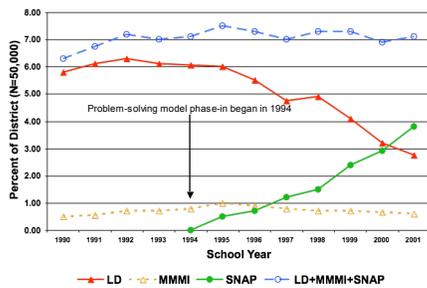
Research on Problem-Solving/RtI

- 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

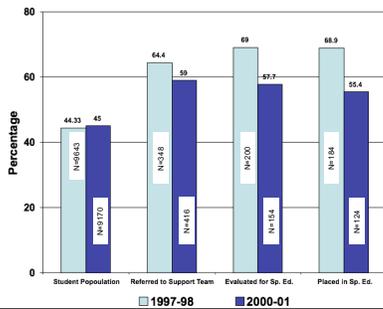(VanDerHeyden, Witt, and Naquin)

Minnesota

- Implemented in 1994

- Tracked data since that time

- Implemented multi-tiered system

- Monitored both eligibility AND student progress both in and out of special education

Child-count percentages for students with high-incidence disabilities (1990-2001): Minneapolis Public Schools

Adapted from Marston (2001).

Percentage of African-American students at each stage of referral process at 41 schools

Bar chart with Percentage (y-axis, 0 to 80) across four stages: Student Population, Referred to Support Team, Evaluated for Sp. Ed., Placed in Sp. Ed.

- Student Population: 1997-98 = 44.33 (N=9643), 2000-01 = 45 (N=9170)
- Referred to Support Team: 1997-98 = 64.4 (N=348), 2000-01 = 59 (N=416)
- Evaluated for Sp. Ed.: 1997-98 = 69 (N=200), 2000-01 = 57.7 (N=154)
- Placed in Sp. Ed.: 1997-98 = 68.9 (N=184), 2000-01 = 55.4 (N=124)

Legend: □ 1997-98 ■ 2000-01

Research and PSM/RtI

- Problem identification is more accurate using the PSM (Gap Analysis) compared to simply teacher referral.

- The number of students requiring services has not diminished-- the WAY the services are provided has changed.

- Universal screening and progress monitoring practices ensure that students do not slip through the cracks

- In most cases, the percent of students receiving LD services has diminished.

# What Have We Learned From Other States?

- Changes in assessment and intervention practices can occur-- generally it takes a number of years to effect the change completely.

- Teacher and parent satisfaction is greater with the PSM/RtI model (Illinois Flexible Service Delivery Model)

- Student performance is enhanced under the PSM/RtI model

- Student/parent rights do not change under this model

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
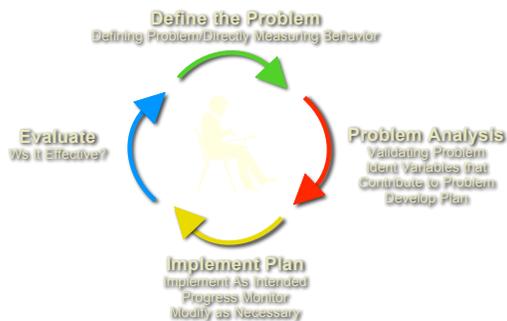
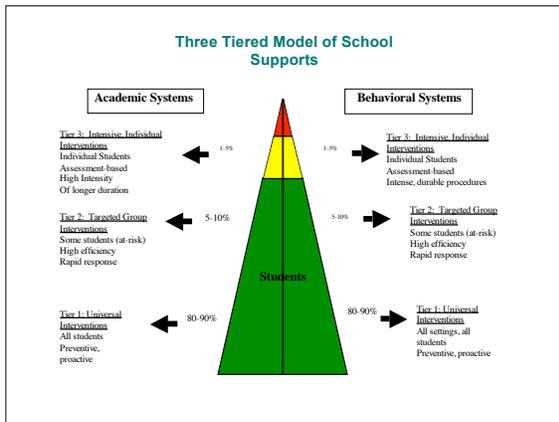# Problem-Solving:
What It Is and Is Not

- What it is….
  - A process designed to maximize student achievement
  - A method focused on outcomes
  - A method to ensure accountability and intervention evaluation
  - It is all about student progress, regardless of where or who that student is
- What it is not…
  - A way to avoid special education placements
  - A less expensive way of schooling

Problem Solving

- Can be applied to the student, classroom, building and district levels
  - *Student*-academic and/or behavior problem
  - *Classroom*- discipline, returning homework
  - *Building*- bullying, attendance
  - *District*- over-/under-representation
  - *Problem*- any problem shared by numbers of students

Three Tiered Model of School Supports

Academic Systems		Behavioral Systems

Tier 3: Intensive, Individual Interventions
Individual Students
Assessment-based
High Intensity
Of longer duration
← 1-5%

1-5% → **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
← 5-10%

5-10% → **Tier 2: Targeted Group Interventions**
Some students (at-risk)
High efficiency
Rapid response

Students

Tier 1: Universal Interventions
All students
Preventive, proactive
← 80-90%

80-90% → **Tier 1: Universal Interventions**
All settings, all students
Preventive, proactive

Tier One

Assessments	Interventions
•Universal/Benchmarks	•Core Curriculum
•AYP	•Evidence-Based
•District-Wide Assessments	•School-Wide PBS
•DIBELS/CBM	
•ODRs	

Tier Two

Assessments	Interventions
•DIBELS/CBM	•Supplemental
•Classroom Observations	•AET/Focused Instruction
•Work Samples	•Social Skills Training
•Rating Scales	•Behavior Plans
•Frequent/Authentic	•AIPs

Tier Three

Assessments	Interventions
•Diagostic	•Intense
•Comprehensive (RIOT)	•Limiting curriculum
•Directly related to problem	•Specialized Instruction
•Linked to Interventions	•Possible eligibility
•Evaluate intervention	•Frequency/Intensity are extraordinary

Example of Tier Level Interventions

Reading

	Tier I	Tier 2		Tier 3
Time	90	120		180
Curricular Focus	5 areas	Less than 5		2 or less
Curricular Breadth	Core	Core + Supplemental		Core + Supplemental + Intensive
Frequency of Progress Monitoring	Yearly or greater	Monthly or greater		Weekly

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Response to Intervention: Definition

- A systematic and data-based method for identifying, defining, and resolving students' academic and/or behavioral difficulties
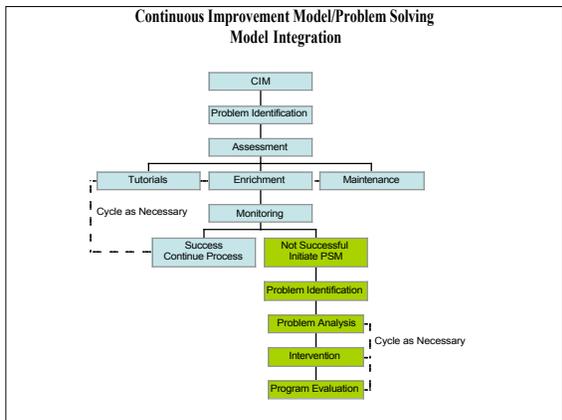

Response to Intervention

- Identify the problem clearly
- Ensure adequate instruction in general education
  - AYP data, district-wide assessment
- Identify that "discrepancy" exists-*initial intervention*
- Problem solve-*intensive intervention in general education*
- Use scientifically-based interventions validated for target problem and ecological fit
- Implement for a reasonable period of time (10-20 weeks)
- Monitor progress frequently, adjust interventions
- Monitor changes in levels of risk
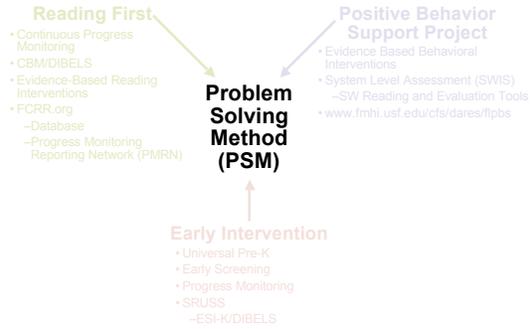- Data-based decision making

Multi-Level Process*

Amount of Resources Needed to Solve the Problem

AIP-3
AIP-2
AIP-1

Level IV
IEP Considerations

Level III
Consultation With Extended Problem Solving Team
58%

Level II
Consultation With Other Resources

Level I
Consultation Between Teachers-Parents
100%

Core + Extraordinary

Core Program + Supplemental + Intensive

Core Program + Supplemental

Core Program

Problem Identification
Problem Analysis
Interventions
Evaluation

Intensity of Problem (Solving)

Adapted From Heartland, IA AEA Model

Continuous Improvement Model/Problem Solving Model Integration

CIM		PSM	
Step 1	Test Score Disaggregation		
Step 2	Time Line Development	Step 1	Problem Identification
Step 3	Instructional Focus		
Step 4	Assessment	Step 2	Problem Analysis
Step 5	Tutorials		
Step 6	Enrichment	Step 3	Intervention
Step 7	Maintenance		
Step 8	Monitoring	Step 4	Program Evaluation

Continuous Improvement Model/Problem Solving Model Integration

CIM
Problem Identification
Assessment
Tutorials — Enrichment — Maintenance
Cycle as Necessary
Monitoring
Success Continue Process
Not Successful Initiate PSM
Problem Identification
Problem Analysis
Intervention
Cycle as Necessary
Program Evaluation

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**Problem Solving: Integrating Universal
Assessment and Prevention/Intervention Systems**

Reading First
• Continuous Progress
  Monitoring
• CBM/DIBELS
• Evidence-Based Reading
  Interventions
• FCRR.org
  – Database
  – Progress Monitoring
    Reporting Network (PMRN)

**Positive Behavior
Support Project**
• Evidence Based Behavioral
  Interventions
• System Level Assessment (SWIS)
  – SW Reading and Evaluation Tools
• www.fmhi.usf.edu/cfs/dares/flpbs

**Problem
Solving
Method
(PSM)**

Early Intervention
• Universal Pre-K
• Early Screening
• Progress Monitoring
• SRUSS
  – ESI-K/DIBELS

Just Read, Florida!
Initiative

• Reading First

• Academic Support Plan for Reading
  – Elementary
  – Middle Grades

Reading First

• Florida Center for Reading Research
  – WWW.FCRR.ORG

• 5 + 3 + ii + iii
  – 5 Components
    • Phonemic Awareness
    • Phonics
    • Fluency
    • Vocabulary
    • Comprehension

Reading First

- <u>3</u> Types of Assessment
  - Screening
  - Diagnosis
  - Progress Monitoring

- Initial Instruction (ii)
  - Explicit, Systematic, Scaffolded, Differentiated, Print Rich

- Immediate Intensive Instruction (iii)
  - Flexible Grouping, Accommodations, Differentiated

Academic Support Plan
K-3

- Tier One (90 Minutes)
  - Initial Instruction
    - Whole Group, Small Group
  - Immediate Intensive Intervention
    - Individual, Small Group
- Tier Two (120 Minutes)
  - Similar, but more time
- Tier Three (180 Minutes)
  - Initial
  - Immediate
  - Computer Lab
  - Language Lesson

Intensive Acceleration Class

- Target is non-performing 3rd graders
- Reduced class size
- Uninterrupted daily reading for majority of day
- Scientifically-based reading program with proven results for "acceleration"
- Intensive language and vocabulary instruction, including use of speech therapist
- Weekly progress monitoring
- Use DIBELS, report to the PMRN
- Report progress to DOE at end of each semester

Middle Grades

- Rigorous Reading Requirement (RRR)
  - 90-, 120-minute blocks
- Specific areas that address the 5 components
- Instructional and support services
- Quarterly reports to superintendent
- Results used as part of annual evaluation of instructional personnel and administrators

Early Intervention

- Universal Pre-K for 4-Year Olds
- School Readiness Uniform Screening System (SRUSS)
  - ESI-K
  - DIBELS
- Clearly Defined Developmental Standards for 3-5
- All Kindergarten Students screened with DIBELS in first 21 days of school

**2004 - 05
Florida School Readiness Uniform
Screening System Results
ESI-K: Students with Valid Scores
(N=175,806)**

12% 5%

83%

Ready Now
Getting Ready
Not Ready Yet
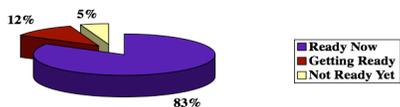
2004 - 05
Florida School Readiness Uniform Screening
System Results
DIBELS Letter Naming Fluency: Students with Valid
Scores
(N=175,023)

20%	48%
17%	
15%	

- Above Average
- Low Risk
- Moderate Risk
- High Risk
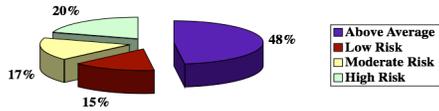
2004 - 05
Florida School Readiness Uniform Screening
System Results
2004 DIBELS Initial Sounds Fluency: Students with
Valid Scores
(N=174,913)

22%	39%
20%	
19%	

- Above Average
- Low Risk
- Moderate Risk
- High Risk
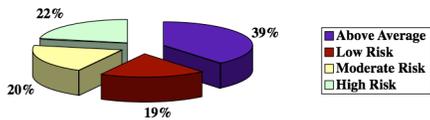
RtI Format in Kindergarten

- Identify 40% 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

The Job Ahead

- **Implement PS as efficiently as possible**
- **Use Multi-Level System**
- **Use Graduated Skill Base**
- **Use existing evidence-based interventions**
- **PS Process Increases in Complexity with Intensity of Problem**

Steps in the Problem-Solving Process

1. Identify replacement behavior
2. Determine expectation level
3. Develop hypotheses(brainstorming)
4. Develop predictions/assessment
5. Develop interventions in those areas for which data are available and hypotheses verified
6. Collect data for hypotheses not verified
7. Progress Monitor
   1. Benchmarks/Peer Performance
   2. Rate of Closure
   3. Intervention Integrity
   4. Modify Interventions

Functional Behavior Assessment: Integration with the PSM

- Step 1: Clear Description of the problem behavior (PSM: Replacement Behaviors)
- Step 2: Identification of events, times and situations that *predict* when the behavior *will* and *will not* occur. (PSM: Hypotheses and Predictions)
- Step 3: Identification of the *consequences that maintain the problem behaviors* (function behavior serves). (PSM: Hypotheses)
- Step 4: Development of hypotheses
- Step 5: Direct Observation data that support hypotheses. (PSM: RIOTS)
- (O'Neil, 1997)

Research on Integrity of Problem Solving
(Flugum and Reschly)

- Use of Behavioral Definition
  – 41% of Teachers/45% of Related Services
- Use of Direct Measure/Baseline
  – 38% of Teachers/27% of Related Services
- Use of Step-by-Step Intervention Plan
  – 53% of Teachers/44% of Related Services
- Graphing Results
  – 7% of Teachers/2% of Related Services
- Compare Results to Baseline
  – 14% of Teachers/11% of Related Services

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

Professional Development

- Pre-service level

- In-service level

- Self-study

Professional Development: Research on Effective Outcomes

- Beliefs
  - Understanding a need for the practice/skill
  - Belief that one possesses the skills to successfully implement practice (efficacy)
- Teaching Components
  - Theory (understanding "why)
  - Demonstration (see it applied)
  - Practice (25 trials?!)
  - Feedback (by persons who are trusted)

Professional Development Content : All Personnel

- Understanding of national, state, district policies/regulations
- Link between NCLB and IDEA 04
- Understanding of the beliefs, knowledge, and skills that support PSM and RtI
- Understanding of the multi-level system, steps in the PSM, and eligibility determination

Professional Development Content : Leadership Level

- Professional development delivery model that best supports implementation
- Staff and budget requirements to integrate general and special education
- Relationship between implementation and expectation for improved student performance
- Barriers that will occur and must be addressed
- Use of technology to support efficient and effective implementation

Professional Development Content : Administrative Level

- Understanding need for universal, strategic, and intensive instructional strategies and interventions
- Components of successful professional development plan
- Skills in data-based decision-making and sharing outcome data
- Social support structures for staff
- Program evaluation

Professional Development Content : Direct Service Staff

- Relationship between PSM, RtI and student achievement
- Increased range of validated instructional practices in general education
- Uses and componets of the PSM
- Technology and other supports
- Administrative and leadership supports
- Practical models and examples with student outcome data
- Demonstration and guided practice

Professional Development Content : Support Service Staff

- All of content for direct service personnel
- Facilitation skills for PSM
- Data-based decision making (RtI)
- Increased knowledge of validated instructional and behavioral support strategies
- Knowledge of effective staff training strategies
- Evaluation strategies to assess instructional quality
- Continuous progress monitoring methods
- Models and methods of social support for staff

A Decade of Building Capacity (1992-2004)

Structures to Build Upon

- The Problem-Solving Process
- Assessment/Progress Monitoring
  - CBM/DIBELS
- Intervention Support
- Program Evaluation and Accountability
- Organizational Development and Systems Support

Implementation in Florida: Critical Components

- Integrate with existing initiatives
  - PBS
  - Reading First
  - Early Intervention
- Efficient Training
  - Problem Solving Method
  - Data Collection and Interpretation
    - CBM, DIBELS, PBS, Local Initiatives
  - Evidence-based Interventions
    - Broward Model, PBS, Reading First
  - Response to Intervention
    - Reading First, Fuchs Model

Critical Components Con'd

- Technical Assistance
  - State and Regional Levels
  - District Personnel (Student Services et al)
  - Technology
- Coaching Model
  - Building Level
- Strong Project Evaluation Model
- Demonstration Districts
- Schools within Districts
- RFA process with commitment and incentives

Timeline

- 2005
  - Hire Central Staff
  - Establish Training Materials and Network
  - Establish RFA Process for Districts
  - Hire TA, Coaching Staff for selected districts
  - Begin administrator training (Summer, 05)
- 2005-2006
  - Initiate in a minimum of 3 Districts with demonstration schools
  - Evaluate implementation and initial outcomes
- 2006-Beyond
  - Expand implementation based on evaluation data from 05-06

Criteria for Demonstration Districts

- Can identify 3 schools to participate
- Commitment of local staff
- Acceptance of coach
- 3-Year Commitment
- Commitment to Data Collection
- Commitment to use of Technology support

Criteria for Schools

- Demonstrated "Need"
  - Academic
  - Behavior
  - Both
- 3-Year Commitment
  Basic Understanding of PSM
- Staff Support
- Willing to accept coach and TA
- Willing to support development in future schools

Training Modules

- Problem-Solving Method
- Evidence-Based Interventions
- Progress Monitoring
- Response to Intervention
- Building-Level Implementation
- Coaching

Project Structure

- Regional Assistance Centers
  - Training
  - Technology
  - Intervention Resources (EBIs)
- Demonstration Districts
  - Selected by RFPs
  - Coaches
- Pilot Buildings within Districts

- Regional Assistance Centers
- Demonstration Districts (to be determined)
- Pilot Schools (to be determined)
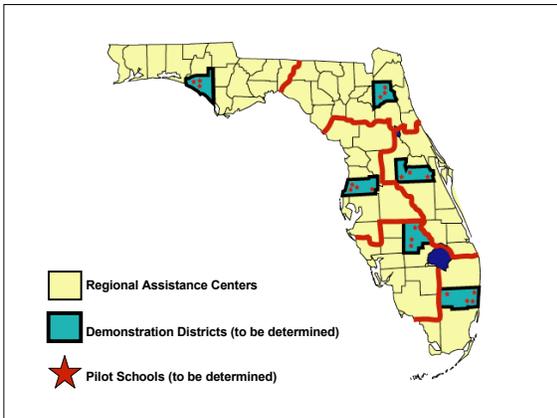
Effective Leadership

- Effective leadership is essential for successful implementation…
    - Building principal who focuses priority on student outcomes
    - Superintendent that supports principals through prioritizing staff training and support
    - District policies and procedures that give priority to practices that relate directly to improving outcomes
    - District policies and procedures that minimize practices that do not have a direct relationship to improving outcomes