

# **Effective Early Intervention and Response-to-Intervention Approaches:**

**Ensuring that IDEA '04 Increases Equity  
While Decreasing Disproportionality**

**Howard M. Knoff, Ph.D.**

**Director, Project ACHIEVE  
Director, Arkansas Department of Education  
State Improvement Grant**

**[knoffprojectachieve@earthlink.net](mailto:knoffprojectachieve@earthlink.net)**

**Howard M. Knoff, Ph.D.**  
**Director, AR State Improvement Grant**  
**Director, Project ACHIEVE**

**49 Woodberry Road**  
**Little Rock, AR 72212**

E-mail: [knoffprojectachieve@earthlink.net](mailto:knoffprojectachieve@earthlink.net)

Phone: 501-312-1484

Websites: [www.projectachieve.info](http://www.projectachieve.info)

[www.arstateimprovementgrant.com](http://www.arstateimprovementgrant.com)



# **The Challenge:**



National Statistics have long shown that Minorities are Consistently Referred and Placed into Special Education Programming at Disproportionate Rates when Compared with Non-Minorities

# Hypothesized Reasons:

1. The lack of effective, differentiated instruction for students with different experiential, thinking, and learning histories— who use and need different teaching strategies to be successful.
2. The lack of early identification and effective early and intensive intervention services for many students, but especially for poor and minority students who often enter school with less pre-academic experiences and academic readiness.

# Hypothesized Reasons:

3. The lack of functional attention and assessment, during the early intervention process, to students' academic and behavior skills and status such that interventions are focused on changing behavior not on "treating labels."
4. The "intervention gap"—involving policies, procedures, people, resources, and expertise— between general and special education services such that the latter is the "first available response" for students not succeeding in general education.
5. The continued notion that "special education" is a place and not a service to change academic and behavioral skills and progress.

# Presentation Overview

- An Introduction to RtI
- Identifying the Necessary/Critical Characteristics for Successful RtI
- The SPRINT (School Prevention, Review, and Intervention Team) Process
- Critical SPRINT Points
- RtI and Disproportionality

# Introduction to RtI. . .

What are the Regulatory  
versus Functional Foundations  
of the Response to  
Intervention process?

# The Reauthorization of IDEA

- ◆ The "Individuals with Disabilities Education Improvement Act"
- ◆ Passed House in 2003, Senate in 2004
- ◆ Signed by President Bush, December, 2004
- ◆ Fully in effect on July 1, 2005
- ◆ Proposed Regulations out for Comment—  
Closed in November, 2005
- ◆ Regulations approved- August, 2006 ???????

# Changes in Legal Requirements (IDEA, 2004)

- ◆ "(A) **IN GENERAL.**—Notwithstanding section 607(b), when determining whether a child has a specific learning disability as defined in section 602, 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 oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning.

# Response to Intervention (IDEA, 2004)

- ◆ **"(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** as a part of the evaluation procedures described in paragraphs (2) and (3)."

## So . . . What does this Mean???

- State regulation can't require only a Discrepancy approach to LD eligibility
- An LEA can use a Problem-solving "process" as their approach to LD eligibility
- This "process" can involve a child's "response" to "research-based intervention"

# Other LD Identification Issues. . .

- ◆ Poor/lack of instruction must be ruled out
- ◆ Students' exposure to, experience in, and interventions within the academic curricula must be considered
- ◆ Students' access to instruction and experience with the academic curricula due to any of the following must be addressed
  - Attendance
  - Health
  - Mobility
- ◆ Classroom-based assessments to track student learning, progress, and mastery must be conducted



---

The hardest thing to do  
in life. . .

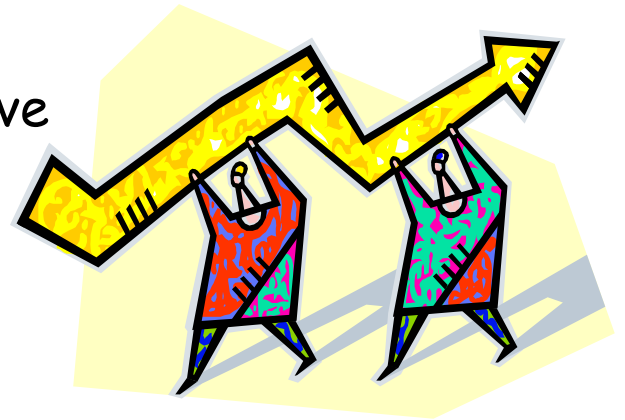
---

. . . Is to learn which bridge  
to cross and which bridge  
to burn.

Lawrence J. Peter

# Where Does Response-to-Intervention (RtI) Start?

- ◆ RtI starts in the general education classroom with evidence-based curricula taught by Highly Qualified Teachers using effective instructional practices
- ◆ RtI involves determining students' mastery of material and response to classroom management through effective assessments and progress monitoring
- ◆ When students are not successful over time, RtI is a component of a problem-solving process that determines why success has not occurred and what to do about it



# LD? Deal or No Deal ???

- ◆ Mary is in Grade 4 functioning consistently- across the primary areas of literacy- at the beginning of third grade level.
- ◆ In September in Grade 2, she had a medical condition that kept her out of school for 3 months. When she returned, her class had a long-term substitute for the rest of the school year due to her teacher's difficult pregnancy and the birth of her child.
- ◆ Mary started Grade 2 on grade level in reading, and ended Grade 2 approximately 8 months behind in literacy skills. During Grade 3, she was taught at her grade—not functional skill—level.

◆ LD ????? Deal or No Deal ?????

# Where does Response-to-Intervention (RtI) Go?

- ◆ For students who are not responding to high quality instruction and teacher-initiated interventions over time, the problem-solving process becomes more formal as (a) functional assessments are completed, (b) resulting in more intensive classroom-based interventions, (c) where student progress is monitored more frequently, and (d) data is used to determine the success of the interventions or the need for more intensive services.
- ◆ More specialized, multidisciplinary resources, then, are used to deliver more specialized interventions to produce improved child outcomes
- ◆ The intensity of services delivered are driven by student outcomes!!

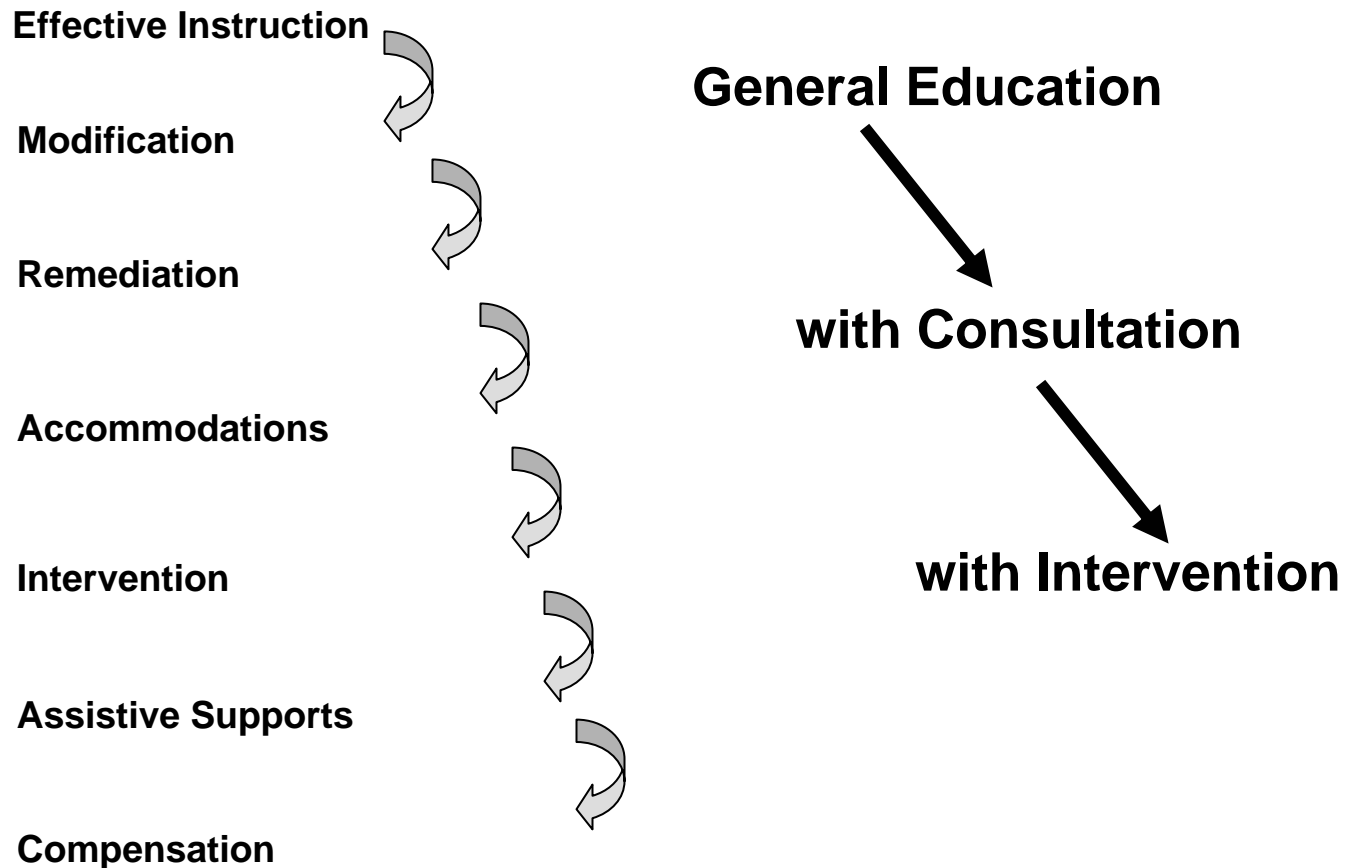
# LD? Deal or No Deal ???

## Mary --Grade 4 Literacy Skills- Beginning of 3<sup>rd</sup> Grade level

- ◆ In September in Grade 4, Mary's reading program consisted of a multi-aged group of 3<sup>rd</sup> and 4<sup>th</sup> graders who were taught at her/their beginning of third grade level.
- ◆ Mary also received 30 minutes of intensive reading fluency and comprehension skill-building practice in a small group setting from September through December- 3 times per week.
- ◆ In January, Mary was functioning at the beginning of 4<sup>th</sup> Grade across all areas of literacy.

◆ LD ????? Deal or No Deal ?????

# The Continuum of Educational Services that Facilitate Students' (Academic and Behavioral) Achievement and Success



# The Essential Response-to-Intervention Components

Curricular and Behavioral Standards and Benchmarks

Progress Monitoring for Mastery or Gap Identification

Data-Based Functional Assessment

Evidence-/Research-based Interventions

Consultative Support



# So...functionally...

## What is a RtI???

- An broad-based, targeted process to evaluate student's response to an intervention
  - \* The focus should be on the (EARLY and EFFECTIVE) INTERVENTION.
  - \* The DESIRED OUTCOMES, through the intervention, determine the evaluation methods and data to be collected (i.e., the RESPONSE)
  - \* In a concrete sense, the collected data (indicating the student's outcome behavior) demonstrates that the intervention either DID or DID NOT WORK.

# What Determines the Success of an RtI Process ???

- Accurate Identification of the "Problem" and the Gap between this and a desired Outcome
- Successful Differentiation between the "Problem" and a "Symptom"
- Accurate Functional Analysis of the Gap (i.e., WHY the gap exists)
- Successful Selection of the Research-based Intervention that links to the Functional Analysis
- Appropriate Training, Preparation, Implementation, and Evaluation of the Intervention

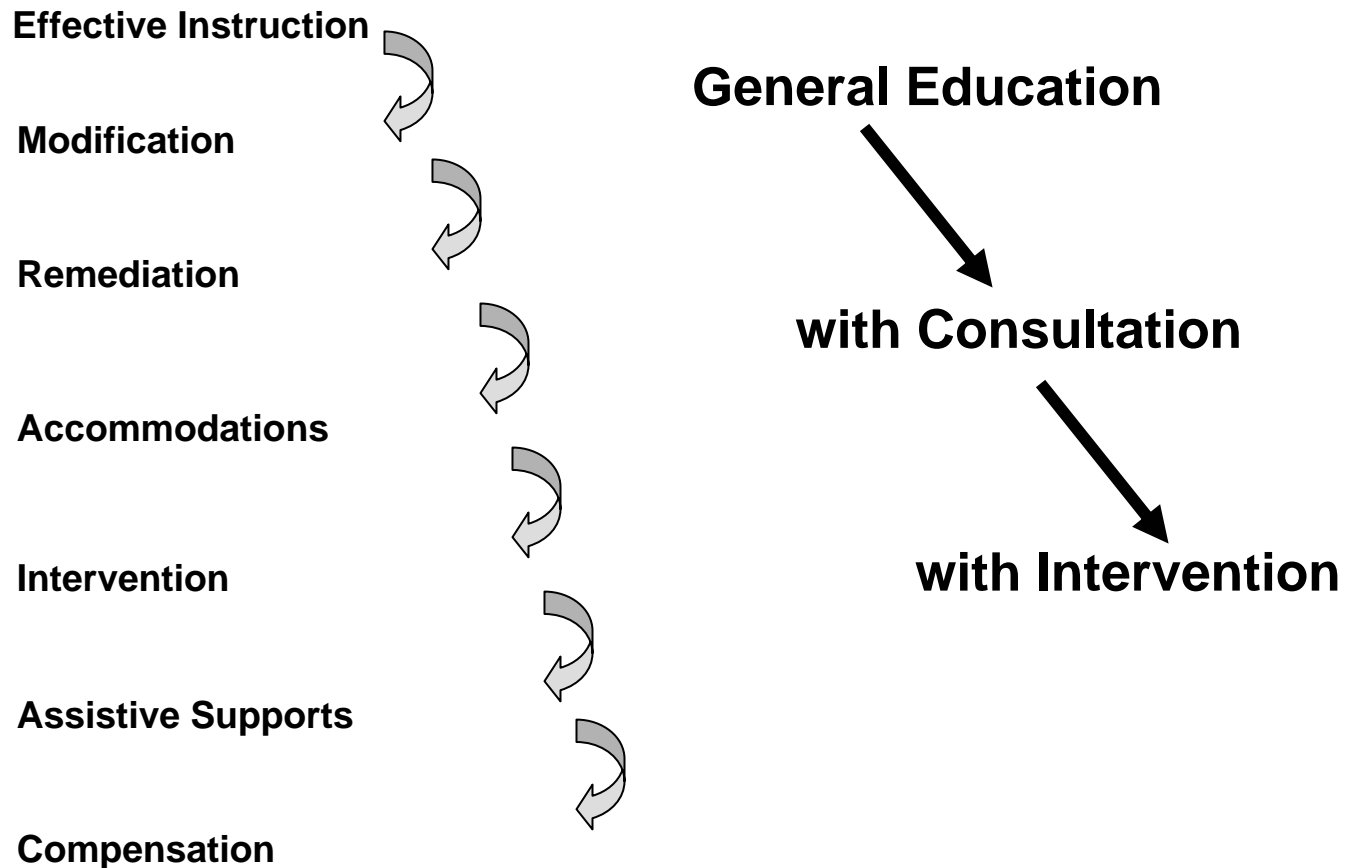
# But. . . Disproportionality Most Often Involves Students with Cognitive Deficits and Challenges

- ◆ Cognitive Deficits most functionally reflect:
  - the capacity to learn and master academic material
  - a students' speed in acquiring/ mastering academic material
- ✓ The QUESTION is: "What services and supports are needed to help a student to master academic material, and how does a school deliver those services (General education, with support, with accommodations, with special education supports and consultations)?"

# AND. . . Disproportionality Also Often Involves Students with Behavioral Challenges

- ◆ Behavioral Challenges most functionally reflect:
  - Skill Deficits
  - Performance Deficits
  - Biological, genetic, physiological conditions
  - Social-emotional, behavioral, and affective traumas, events, chronic circumstances, reinforcement patterns, and inconsistent messages and interactions
- ✓ The QUESTIONS are: "What services and supports are needed to help students learn and master prosocial skills, decrease inappropriate behavioral (including cognitive) patterns and responses, and to respond to social-emotional and affective (past and present) situations)?"
- ✓ How does a school deliver the needed services (General education, with support, with accommodations, with special education supports and consultations)?"

# These Questions are BETTER Answered HERE, ... than through Special Education Eligibility Criteria and Processes



# The Challenge:

How do we complete the shift to:

- Effective academic and behavioral instruction for all students, and
- Effective early intervention services and interventions for students who need them, while
- Avoiding a mindset that a student's lack of a RtI immediately "triggers" a referral for special education services?

# In a Phrase:

How do we ensure that Disproportionality does NOT INCREASE because our most At-Risk Students do not respond to interventions as quickly or completely as others, and the lack of a Rtl is used as a CRITERION of special education referral (and placement)?

# Again...The Service Delivery "Facilitators" or the RtI "Pitfalls"

- Accurately Identifying the Problem
- Identifying the Skill Gap
- Functional Analysis (Explaining) the Skill Gap
- Selecting Scientifically-based Interventions
- Successfully Implementing and Evaluating  
the Intervention

# Arkansas' State Improvement Grant Early Intervention SPRINT Process

SPRINT:      S    chool  
                  P    revention,  
                  R    eview, and  
                  IN    tervention  
                  T    eam

# Key Points

- ◆ SPRINT is available for any academic, behavioral, teacher or student concern
- ◆ Teachers, support staff, administrators, or parents can request a SPRINT Team consultation



---

# The SPRINT Process focuses on the ....

---



- ◆ General education/  
classroom environment
- ◆ General education/  
classroom teacher
- ◆ Use of collegial  
consultation

# What are the Goals of the SPRINT Process?

To address the needs of students experiencing academic or behavioral difficulties by:

- ◆ Using a systematic problem-solving process that links functional assessment to evidence-based or research-based interventions.
- ◆ Consulting with classroom teachers so that the identified interventions are implemented with integrity and success.
- ◆ To establish assessment and intervention baselines in case more intensive interventions are needed later.
- ◆ To increase the knowledge and skills of all of the teachers and other professionals involved.

# What is the SPRINT's Primary Service Delivery Model ???

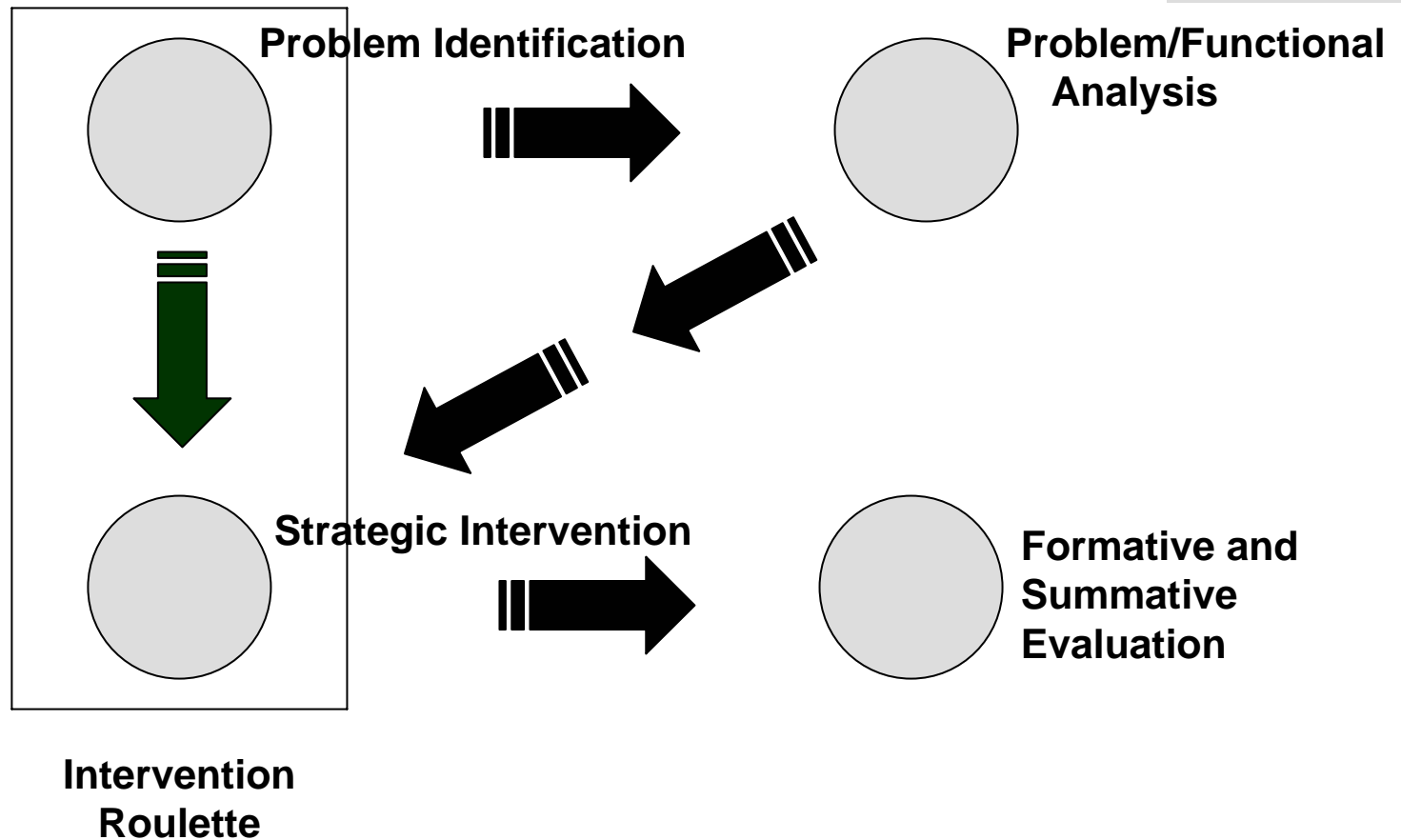
**Problem-Solving - Consultation - Intervention**

**NOT**

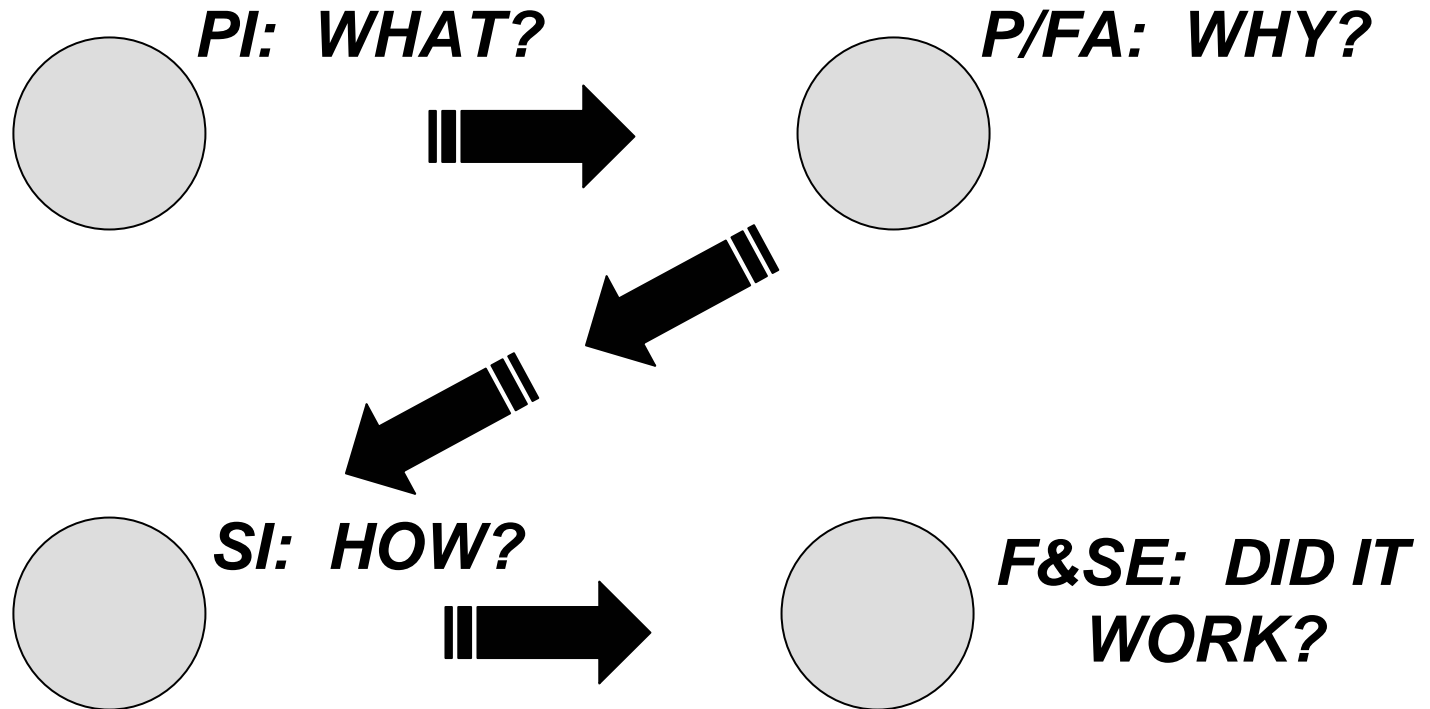


**Wait to Fail - Refer -  
Test - Place**

# Problem Solving and Data-Based Functional Assessment



# Functional Assessment Questions within Data-Based Problem Solving



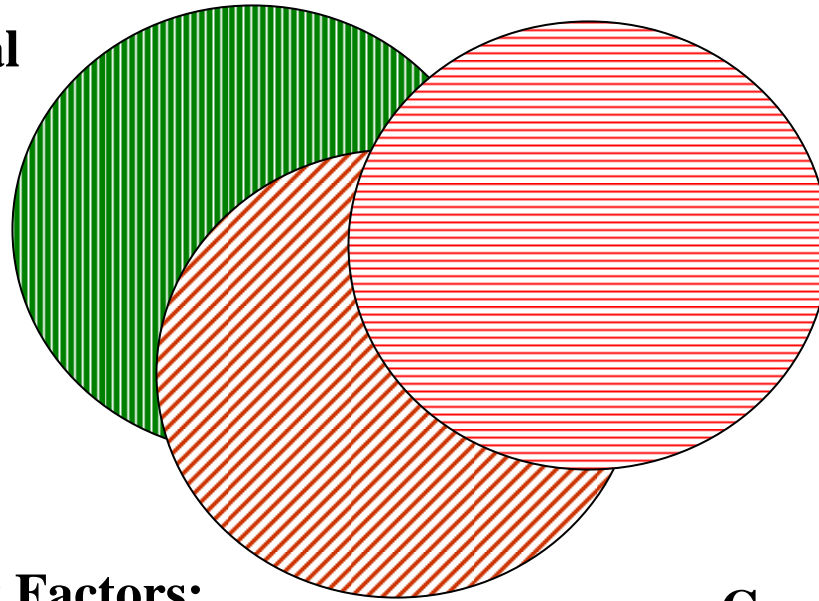
# Fundamental Points...

- ◆ All SPRINT referrals are referrals for problem solving.
- ◆ Students are not referred. . .  
Instructional environments are referred.
- ◆ The focus is on early intervention, not "waiting to fail."
- ◆ Coordinated & well-integrated resources are needed early on to maximize success.

# Components of the Instructional Environment

## **Teacher-Instructional Factors:**

Are teachers well-matched to their students and curricula?



## **Student Factors:**

Are students prepared and “programmed” for success?

## **Curricular Factors:**

Are curricula well-matched to students and teachers?

# Fundamental Points...cont.

- ◆ All interventions must be outcome-based.
- ◆ Interventions must be formatively evaluated to monitor progress over time.
- ◆ The ultimate goals of intervention:
  - Help students to master their academic skills and succeed in general education environment.
  - Help students to learn and master interpersonal and self-management skills.

# All Interventions are Implemented through Consultation

## The Goals of Classroom-Based Consultation:

- ◆ Solve the current student situation
- ◆ Implement successful, strategic interventions
- ◆ Increase the intervention skill levels of those involved in the process
- ◆ Enhance the future problem-solving and intervention skills of those involved

# An Overview to the Problem Solving Process

- ◆ Clarify/define the problem (Complete Comprehensive Record Review)
- ◆ Identify replacement behaviors
- ◆ Identify skill gap(s)
- ◆ Identify:
  - Relevant known information
  - Relevant unknown information
  - Irrelevant information

# An Overview to the Problem Solving Process

- ◆ Generate & test hypotheses (using functional assessment) to explain why problem is occurring.
- ◆ Write a plan with evidence-based or research-based interventions linked to the validated hypotheses.
- ◆ Implement and evaluate the intervention and plan. (Develop Academic or Behavioral Intervention Plan)

# Problem Solving... begins with "A Gap"

## PREREQUISITES:

- ◆ A Grade-Level "Academic Roadmap" in all Curricular Areas that Specifies the Functional Academic Skills that Students should master and be able to demonstrate and apply
- ◆ A Developmentally-Sensitive "Behavioral Roadmap" that Specifies the Personal/Self-Management, Interpersonal, and Environmental/Situational Behaviors that Students should master and be able to demonstrate and apply in the school setting

# The Grade-Level "Academic Roadmap"

NEED, IN EACH CURRICULAR AREA, FROM  
PREKINDERGARTEN THROUGH HIGH SCHOOL:

- ◆ State Standards, Benchmarks, Outcomes
- ◆ Curricular Scope & Sequence Goals and Objectives that cross-reference the State Standards and Benchmarks
- ◆ Criteria for Student Mastery of these Standards, Benchmarks, Goals, and Objectives
- ◆ Authentic and Functional Assessments that reliably and validly determine Mastery

# Defining the Academic Gap

The Difference between Students' Instructional Mastery of Academic Skills as Contrasted with their Expected Mastery—based on State and Curricular Benchmarks at their Chronological Age—in:

- Literacy: phonemic awareness, sound-symbol association/phonics, decoding/ fluency, vocabulary, comprehension
- Mathematics: numeration, calculation, application
- Language arts
- Science, social studies

# The Developmentally-Sensitive "Behavioral Roadmap"

NEED AT EACH DEVELOPMENTAL/MATURATIONAL/GRADE LEVEL, FROM PREKINDERGARTEN THROUGH HIGH SCHOOL, SPECIFIC BEHAVIORAL EXPECTATIONS RELATED TO:

- ◆ Personal/Self-Management Behaviors
  - Attention Control Skills
  - Emotional Control Skills
  - Self-Concept/Self-Esteem Skills
  
- ◆ Interpersonal Behaviors
  - Engagement/Response Skills
  - Problem-Solving Skills
  - Conflict Resolution Skills
  
- ◆ Environmental/Situational Behaviors
  - Classroom Routine Skills
  - Academic Supporting Behaviors
  - Building Routine Skills

# Defining the Behavioral Gap

The Difference between Students' Mastery of Functional Behavioral Skills as Contrasted with the Expected Mastery—based on Developmental and Normative "Standards" at their Chronological Age.

Many behavioral gaps result in the need to:

- Increase or establish new behaviors
- Decrease or eliminate inappropriate behaviors
- Learn attention & engagement skills
- Learn social, self-management & self-control skills
- Address externalizing behavior (anger, acting out, aggression)
- Address internalizing behavior (anxiety, withdrawal, depression)
- Increase motivation
- Learn/Increase Peer engagement & management skills

# Characteristics of Effective Interventions within the SPRINT Process

They are:

- ORGANIZED along a Flexible Continuum that is Anchored by Effective (General Education) Classroom Instruction
- LINKED to the Functional Assessment of "The Gap" and are Evidence-based
- ATTENTIVE to: Social Validity, Acceptability, Treatment Integrity, Shared Benefits, Generalization
- Strategically ORGANIZED and IMPLEMENTED through a Written Academic/Behavioral Intervention Plan
- Continuously (Formatively) and Responsively (Summatively) EVALUATED

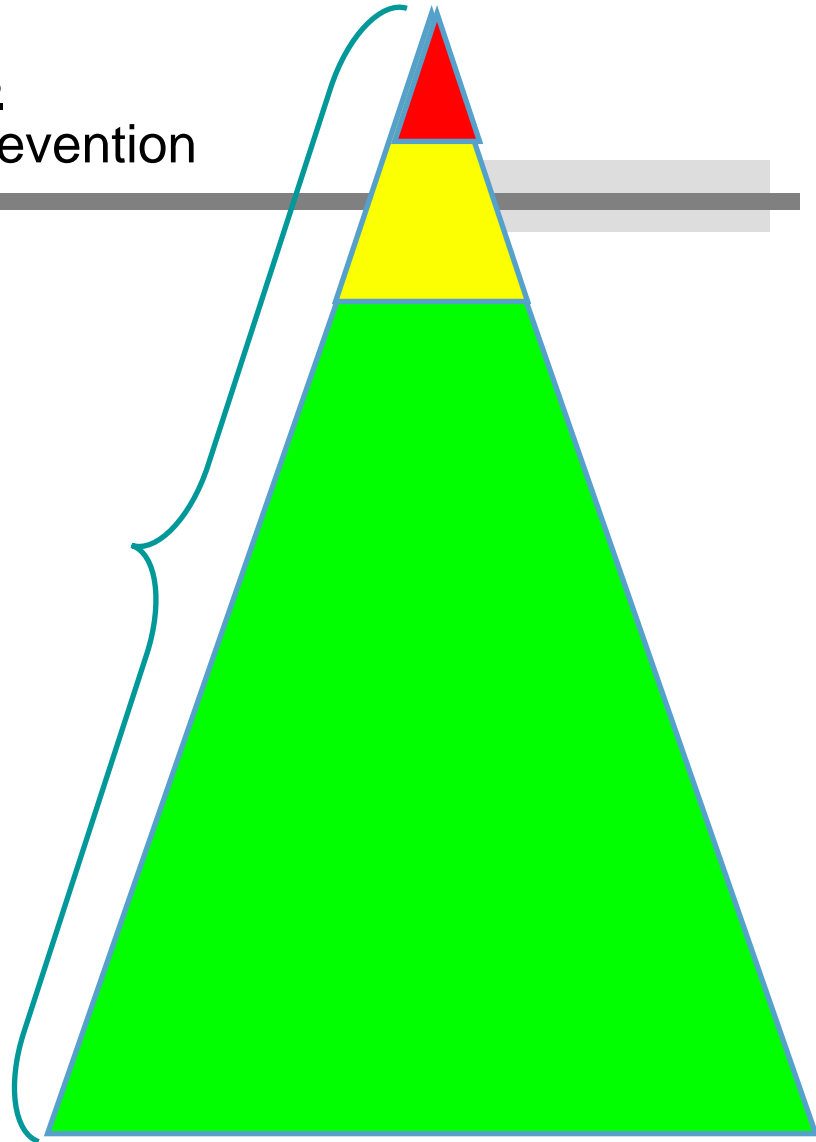
---

## Academic Interventions

Primary, Secondary, and Tertiary Prevention

---

Literacy  
Mathematics  
Written Expression/Language Arts  
Science  
Social Studies  
The “Arts”



# Examples of Academic Interventions

## Literacy:

The National Reading Panel recently undertook a comprehensive review of rigorous studies - those using randomized controls or good quasi-experimental designs - of what works in teaching children to read. The Panel's review identified several effective practices, including:

- \* Teaching phonemic awareness - i.e., the ability to focus on and manipulate phonemes in spoken words (effect size averaged 0.5 standard deviations, which means that the 50<sup>th</sup> percentile student in the treatment group scored higher than about 70 percent of the controls).

# Examples of Academic Interventions

## Literacy:

Phonics instruction - i.e., teaching beginning readers how letters are linked to sounds and how to apply this knowledge to reading (effect size averaged 0.4 standard deviations, which means that the 50<sup>th</sup> percentile student in the treatment group scored higher than about 67 percent of the controls)

Guided oral reading with feedback (effect size averaged 0.4 standard deviations, which means that the 50<sup>th</sup> percentile student in the treatment group scored higher than about 67 percent of controls).

Randomized controlled trials have also identified a peer-tutoring intervention that is effective and replicable in teaching reading and mathematics to kindergarten and elementary school students. In this intervention, students are grouped in pairs, and each member of the pair alternately serves as tutor and tutee according to a well-defined protocol. The effect size of this intervention generally falls between 0.2 and 0.6 standard deviations (which means that the 50<sup>th</sup> percentile student in the peer-tutored group scores higher than 58-73 percent of the controls).

# Examples of Academic Interventions

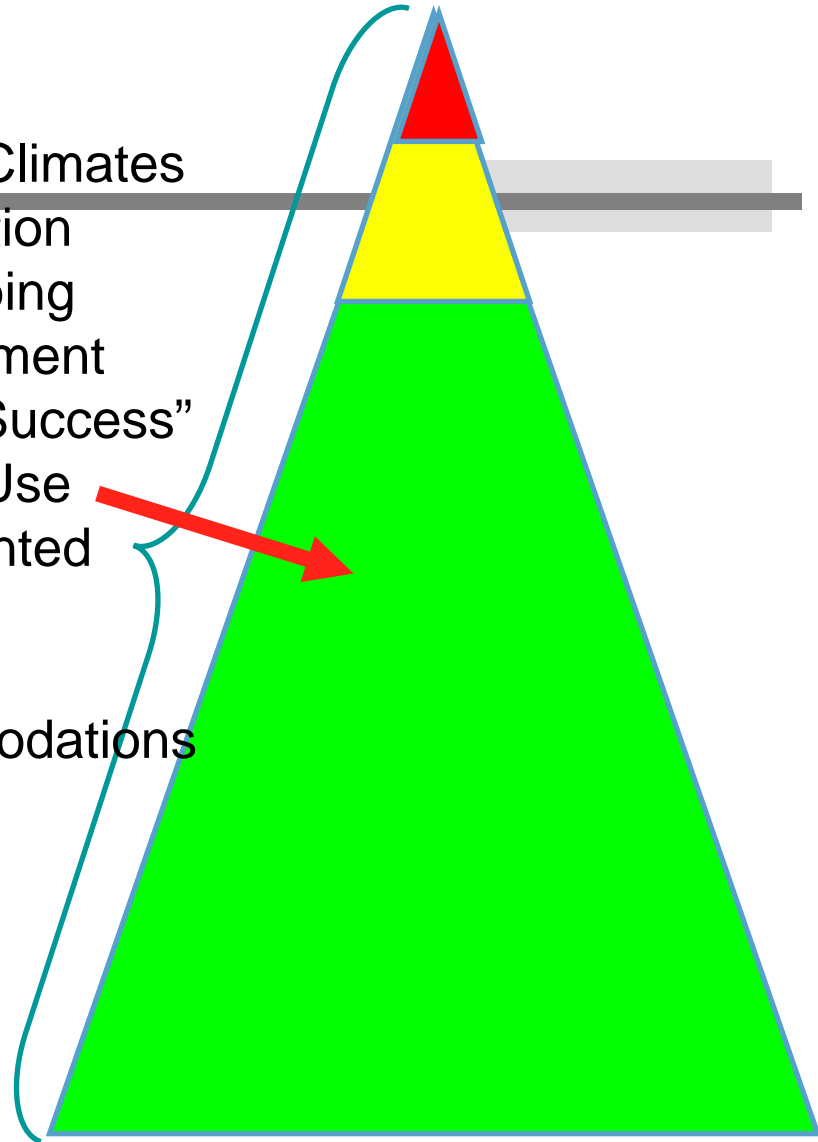
## Literacy Interventions:

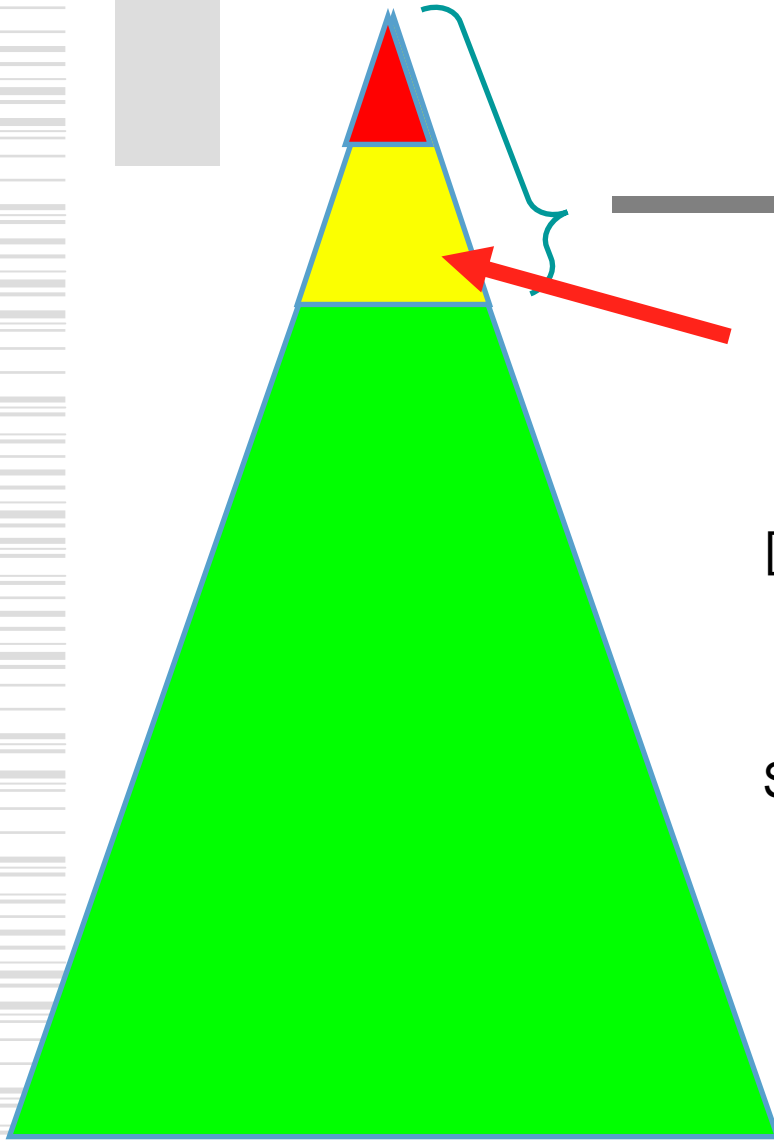
Developed by the SIG based on *Smart Start, Smart Step, Next Step* -

[www.literacymatrix.com](http://www.literacymatrix.com)

## Behavioral Intervention: Primary Prevention

Positive School and Classroom Climates  
Effective Classroom Instruction  
Effective Instructional Grouping  
Effective Classroom Management  
Student Instruction in “Zones of Success”  
Social Skill Instruction and Use  
Well-Designed and Implemented  
Accountability Systems  
Consistency  
Student Modifications & Accommodations  
Early Intervention





## **Behavioral Intervention: Secondary Prevention/ Strategic Intervention Programs**

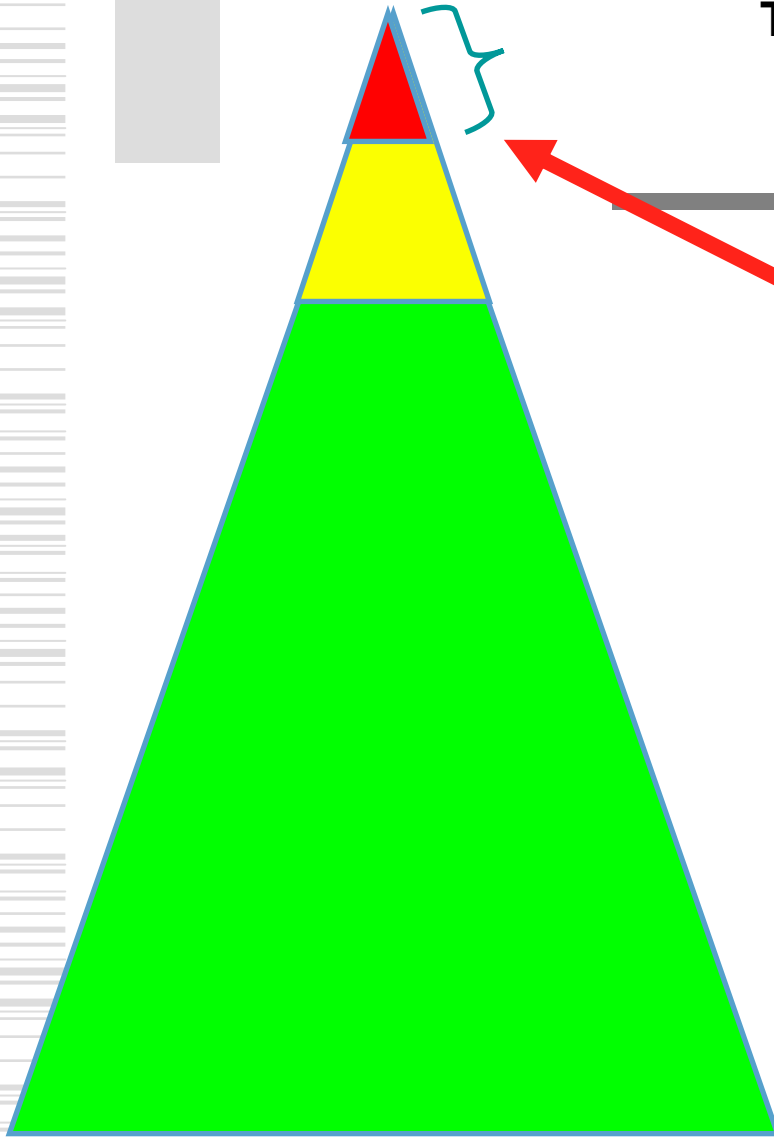
Peer/Adult Mentoring Programs  
Peer/Adult Mediation Programs

Strategic Behavioral Interventions  
(Behavioral Matrix Intensity II and III)  
[Response Cost, Positive Practice/Restitutive  
Overcorrection, Group Contingencies,  
Cognitive-Behavioral Strategies, etc.]

Small Group Social Skills/Socialization Training  
Anger-/Emotion-/Self- Control Training  
Attention-Control Training

Special Situation Groups: Ex. Divorce, Loss,  
PTSD, Self-Concept

**Behavioral Intervention:  
Tertiary Prevention-- Intensive Needs/Crisis  
Management Programs**



Individual Counseling/Behavior Therapy  
(Behavioral Matrix Intensity III and IV)  
[Relaxation Therapy, Desensitization,  
Cognitive-Behavioral Strategies, etc.]

School-Based Mental Health Services

Intensive Wrap-Around/  
Continuum of Care Programming

# Meeting The Challenge:

If we focus on:

- ❑ Effective academic and behavioral instruction for all students, and Effective early intervention services and interventions for students who need them, and
- ❑ Avoid the “Rtl failure → Special Education referral” mindset,
- ❑ We will serve more students, more successfully, more equitably, in the general education classroom and curriculum.

# For more information

*See the Arkansas School Improvement Grant  
Website at*

<http://arstateimprovementgrant.com>

*Click the link for*

**Technical Assistance Papers**

*select article*

[Functional Assessment and Data-based Problem  
Solving](#)