

# What is Response to Intervention (RTI)?

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Tessie Rose Bailey, PhD  
National Center on Response to Intervention



National Center on  
Response to Intervention



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# Defining RTI

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Response to intervention (RTI) integrates assessment and intervention within a school-wide, multi-level prevention system to maximize student achievement and reduce behavior problems.

(National Center on Response to Intervention)



# Defining RTI

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With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions based on a student's responsiveness, and RTI may be used as part of the determination process for identifying students with specific learning disabilities or other disabilities

(National Center on Response to Intervention)



# RTI as a Preventive Framework

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- RTI is a multi-level instructional framework aimed at improving outcomes for ALL students.
- RTI is preventive and provides immediate support to students who are at risk for poor learning outcomes
- RTI may be a *component* of a comprehensive evaluation for students with learning disabilities.



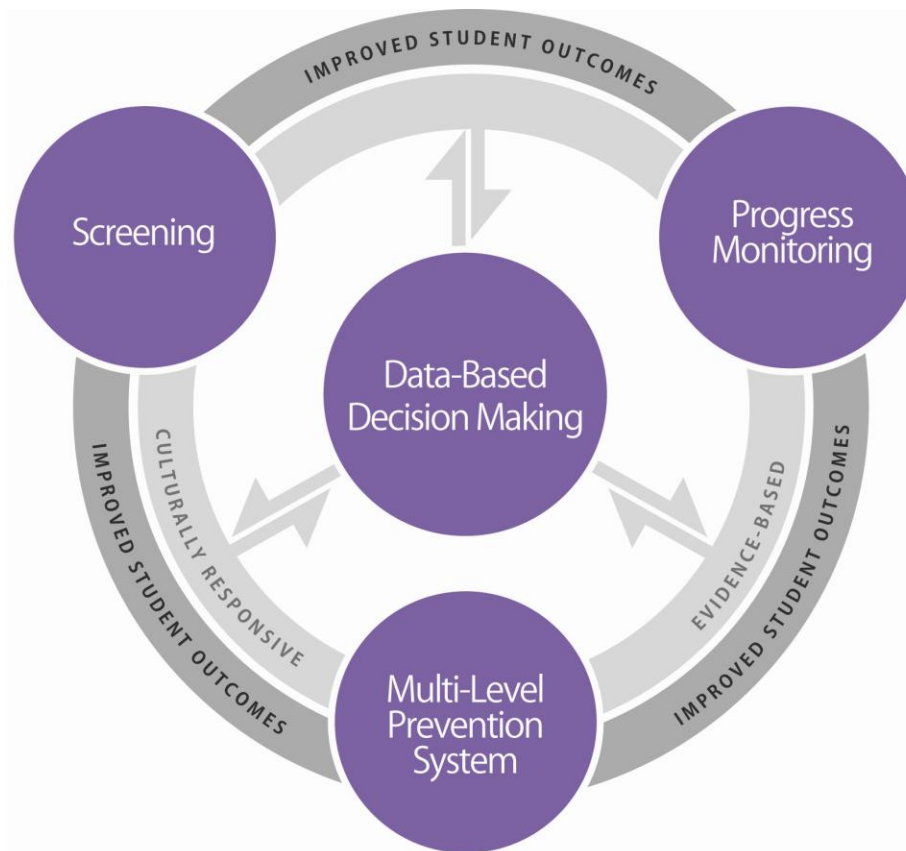
# Essential RTI Components

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- School-wide, Multi-level Prevention System
  - Primary Level
  - Secondary Level
  - Tertiary Level
- Screening
- Progress Monitoring
- Data-Based Decision Making for:
  - Instruction
  - Movement within the multi-level system
  - Disability identification (in accordance with state law)



# Essential Components of RTI



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# SCREENING



# Screening

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- **PURPOSE:** identify students who are at risk of poor learning outcomes
- **FOCUS:** all students
- **TOOLS:** brief assessments that are valid, reliable, and demonstrate diagnostic accuracy for predicting learning or behavioral problems
- **TIMEFRAME:** administered more than one time per year (e.g., Fall, Winter, Spring )



# Screening

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Answers the questions:

- Is our core curriculum working?
- Is instruction effective?
- Which students need additional assessment and instruction?



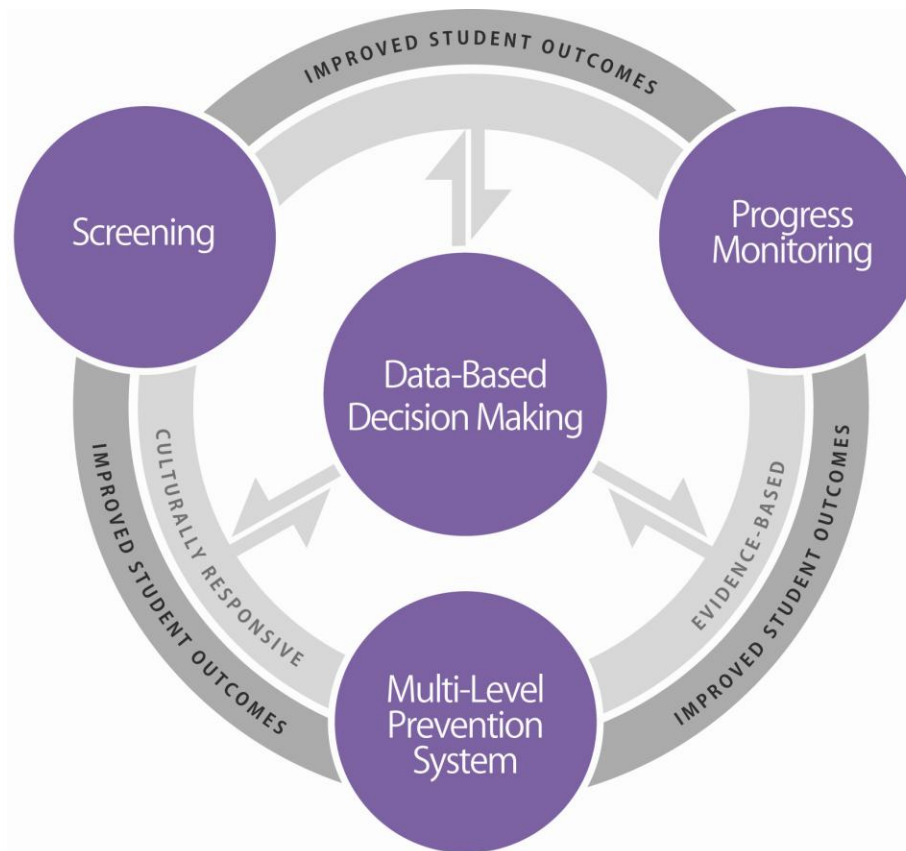
# NCRTI Screening Tools Chart

TOOLS	AREA	Classification Accuracy	Generalizability	Reliability	Validity	Disaggregated Reliability, Validity, and Classification Data for Diverse Populations	Efficiency			
							Administration Format	Administration & Scoring Time	Scoring Key	Norms/ Benchmarks
AIMSweb	Reading Curriculum Based Measurement (R-CBM)	●	Moderate High	●	●	—	Individual	2 Minutes	Yes	Yes
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	Letter Naming Fluency	○	Moderate Low	●	●	—	Individual	2 Minutes	Yes	Yes
	Nonsense Word Fluency	●	Moderate Low	●	●	○	Individual	2 Minutes	Yes	Yes
	Oral Reading Fluency	●	Moderate High	●	●	●	Individual	2 Minutes	Yes	Yes
	Phoneme Segmentation Fluency	○	Moderate Low	●	○	●	Individual	2 Minutes	Yes	Yes
Scholastic	Phonics Inventory - Screener Version	●	Moderate High	●	●	—	Individual Group	10 Minutes	Computer Scored	No
STAR	Early Literacy	●	Broad	●	●	●	Individual Group	10 Minutes	Computer Scored	Yes
	Reading	●	Moderate High	●	●	●	Individual Group	10 Minutes	Computer Scored	Yes
STEEP	Oral Reading Fluency	●	Moderate High	●	●	—	Individual	1 Minute	Yes	Yes

**Chart Legend:** ● Convincing Evidence | ● Partially Convincing Evidence | ○ Unconvincing Evidence | — No Evidence Submitted



# Essential Components of RTI



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# PROGRESS MONITORING



# Progress Monitoring

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- **PURPOSE:** monitor student's response to primary, secondary, or tertiary instruction in order to estimate rates of improvement, identify students who are not demonstrating adequate progress, and compare the efficacy of different forms of instruction
- **FOCUS:** students identified through screening as at risk for poor learning outcomes
- **TOOLS:** brief assessments that are valid, reliable, and evidence-based
- **TIMEFRAME:** students are assessed at regular intervals (e.g., weekly, biweekly, or monthly)



# Progress Monitoring

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Answers the questions:

- Are students meeting short- and long-term performance goals?
- Are students making progress at an acceptable rate?
- Does the instruction need to be adjusted or changed?



# NCRTI Progress Monitoring Tools Chart

General Outcome Measures

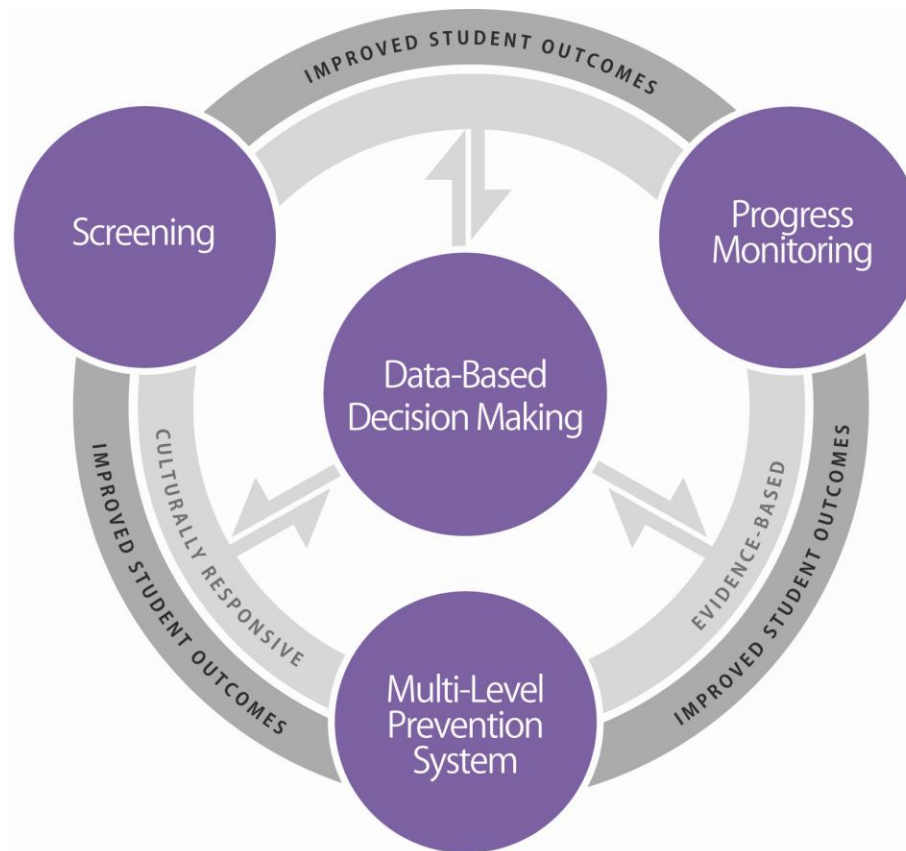
Mastery Measures

TOOLS	AREA	Reliability of the Performance Level Score	Reliability of the Slope	Validity of the Performance Level Score	Predictive Validity of the Slope of Improvement	Alternate Forms	Sensitive to Student Improvement	End-of-Year Benchmarks	Rates of Improvement Specified	Norms Disaggregated for Diverse Populations	Disaggregated Reliability and Validity Data
	Test of Early Literacy - Nonsense Word Fluency	●	●	●	●	●	◐	●	●	No	●
	Test of Early Literacy - Phonemic Segmentation Fluency	●	●	●	●	●	◐	●	●	No	●
Curriculum Based Measurement in Reading (CBM-R)	Letter Sound Fluency	●	●	●	●	●	●	●	●	No	—
	Maze Fluency	●	●	●	●	●	●	●	●	No	—
	Passage Reading Fluency	●	●	●	●	●	●	●	●	No	—
	Word Identification Fluency	●	●	●	●	●	●	●	●	No	—
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	Initial Sound Fluency	●	—	●	—	●	●	○	○	No	—
	Nonsense Word Fluency	●	—	●	○	●	●	○	○	No	—

**Chart Legend:** ● Convincing Direct Evidence | ◐ Partially Convincing Evidence or Convincing Indirect Evidence | ○ Unconvincing Evidence | — No Evidence Submitted



# Essential Components of RTI

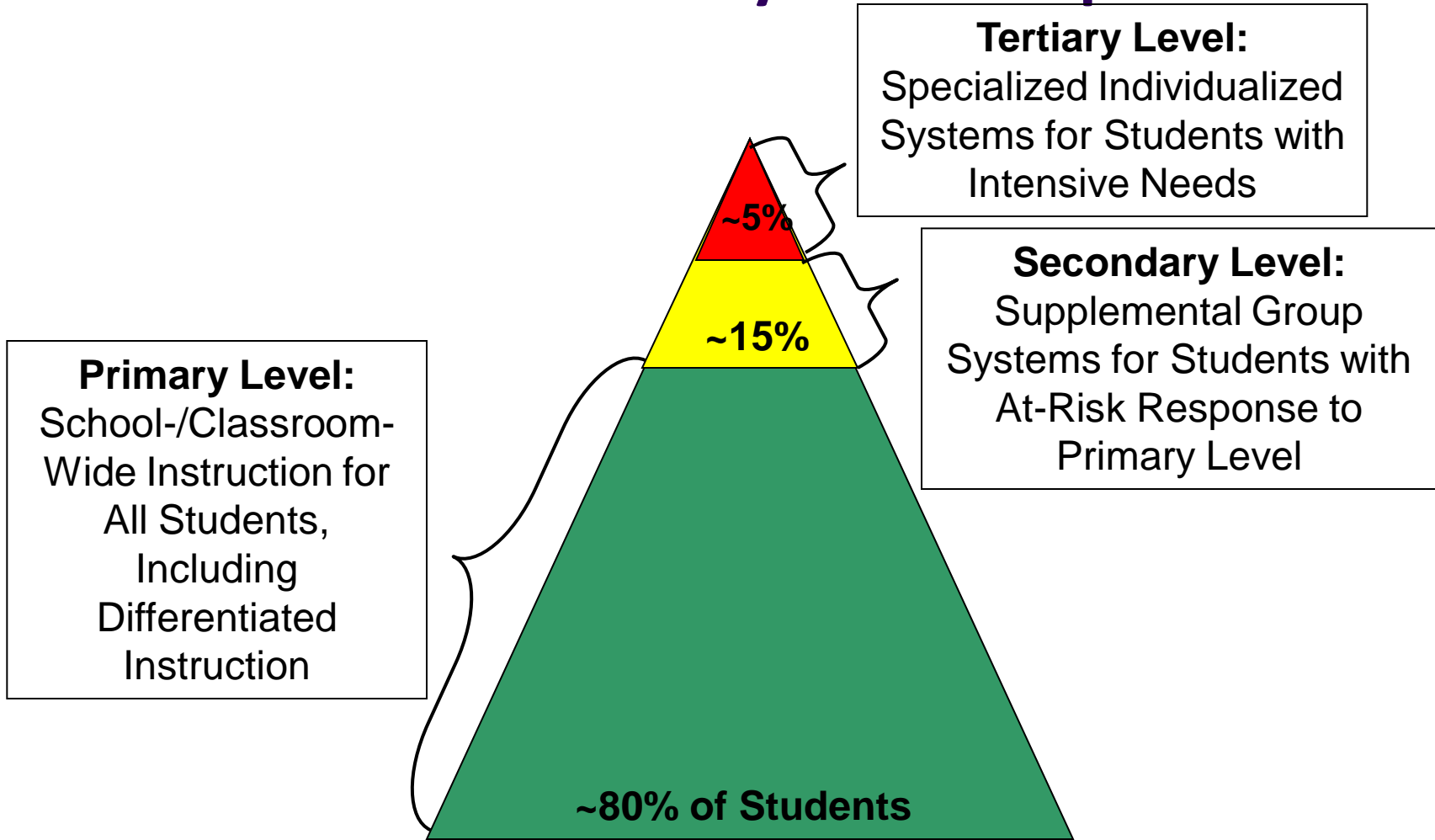


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# SCHOOL-WIDE, MULTI-LEVEL PREVENTION SYSTEM



# Essential Tiered System Components



# Primary Level

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- **FOCUS:** all students
- **INSTRUCTION:** District curriculum and instructional practices that are evidence-based; aligned with state or district standards; incorporate differentiated instruction
- **SETTING:** general education classroom
- **ASSESSMENTS:** screening, continuous progress monitoring, and outcome measures



# Secondary Level

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- **FOCUS:** students identified through screening as at-risk for poor learning outcomes
- **INSTRUCTION:** targeted, supplemental instruction delivered to small groups
- **SETTING:** general education classroom or other general education location within the school
- **ASSESSMENTS:** progress monitoring; diagnostic



# Tertiary Level

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- **FOCUS:** students who have not responded to primary or secondary level prevention
- **INSTRUCTION:** intensive, supplemental instruction delivered to small groups or individually
- **SETTING:** general education classroom or other general education location within the school
- **ASSESSMENTS:** progress monitoring, diagnostic



# Changing the Intensity and Nature of Instruction

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- Duration
- Frequency
- Interventionist
- Group size
- Intervention



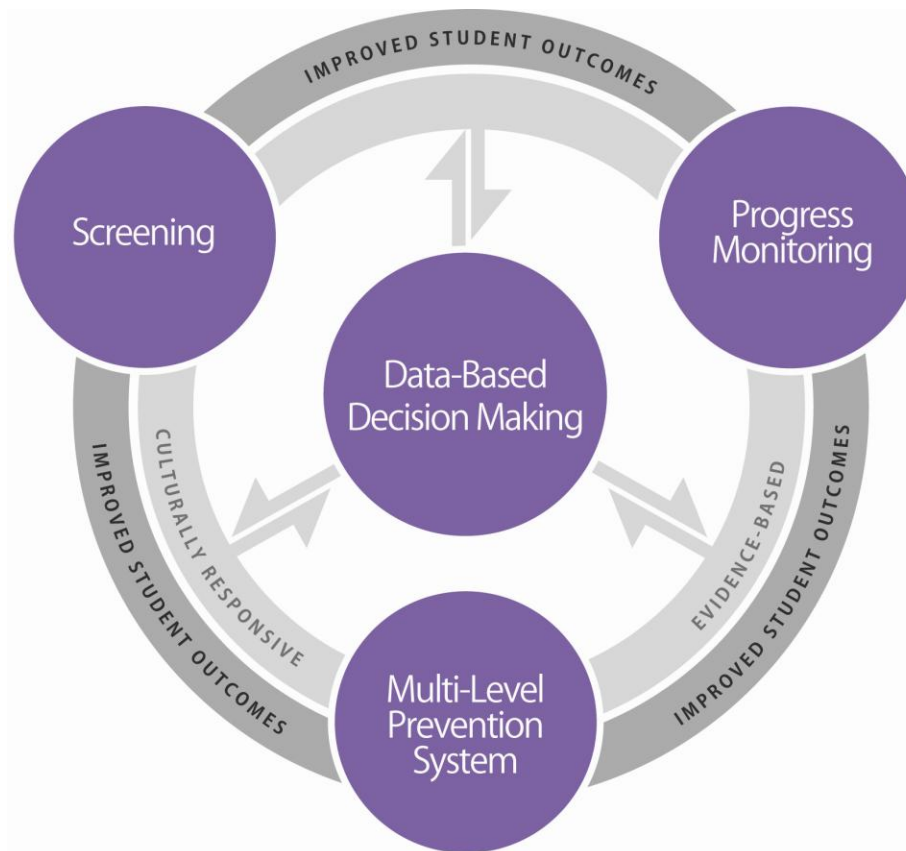
# NCRTI Instruction Tools Chart

Program	Study	Study Quality				Effect Size			
		Participants	Design	Fidelity of Implementation	Measures	Full Sample			Disaggregated Sample
						Number of outcome measures	Mean	Range	Subgroup(s)
Corrective Reading Decoding	Benner, Beaudoin, & Stein (2005)	○	○	◐	●	4 Reading	Inadequate information		—
	Gunn, Biglan, Smolkowski, & Ary (2000)	●	●	○	●	5 Reading	Inadequate information		—
Early Vocabulary Connections	Nelson, Vadasy, & Sanders (in submission)	●	●	◐	●	3 Reading	0.38	0.23 to 0.67	—
Failure Free Reading	Torgesen et al. (2006)	●	◐	●	●	18 Reading 1 Writing 1 Math	Inadequate information		—
Hot Math Tutoring	Fuchs, et al. (2008)	●	●	●	●	4 Math	0.88	0.38 to 1.15	—
My Sidewalks Intensive Reading Intervention	Baird-Wilkerson (2008)	●	●	○	●	14 Reading	0.01	-0.12 to 0.24	—
Number Rockets	Fuchs et al. (2005)	●	●	●	●	7 Math	0.33	0.03 to 0.64	—
Pirate Math Individual Tutoring	Fuchs et al. (2009)	●	●	●	●	7 Math	0.50	0.14 to 0.79	—
Read Naturally	Heistad (2005)	●	◐	○	●	3 Reading	0.26	0.14 to 0.39	—
Reading Mastery	Carlson & Francis (2002)	○	○	○	○	2 Reading	Inadequate information		—
	Gunn, Biglan, Smolkowski, & Ary (2000)	●	●	○	●	5 Reading	Inadequate information		—
	Schwartz (2005)	●	◐	○	●	10 Reading	0.90	0.14 to 2.09	—

Legend: ● Convincing Evidence   ◐ Partially Convincing Evidence   ○ Unconvincing Evidence



# Essential Components of RTI



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# DATA-BASED DECISION MAKING



# Data-Based Decision Making: The Basics

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- Data analysis is at all levels of RTI implementation (e.g., state, district, school, grade level) as well as all levels of prevention (e.g., primary, secondary, tertiary)
- Establish routines and procedures for making decisions
- Explicit decision rules for assessing student progress (e.g., state and district benchmarks, level and/or rate)
- Data is used to compare and contrast the adequacy of the core curriculum and the effectiveness of different instructional and behavioral strategies



# Data-Based Decision Making: Types of Decisions

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- Instruction
- Movement within the multi-level prevention system
- Disability identification (in accordance with state law)



# Data-based Decision Making: Learning Disability Eligibility

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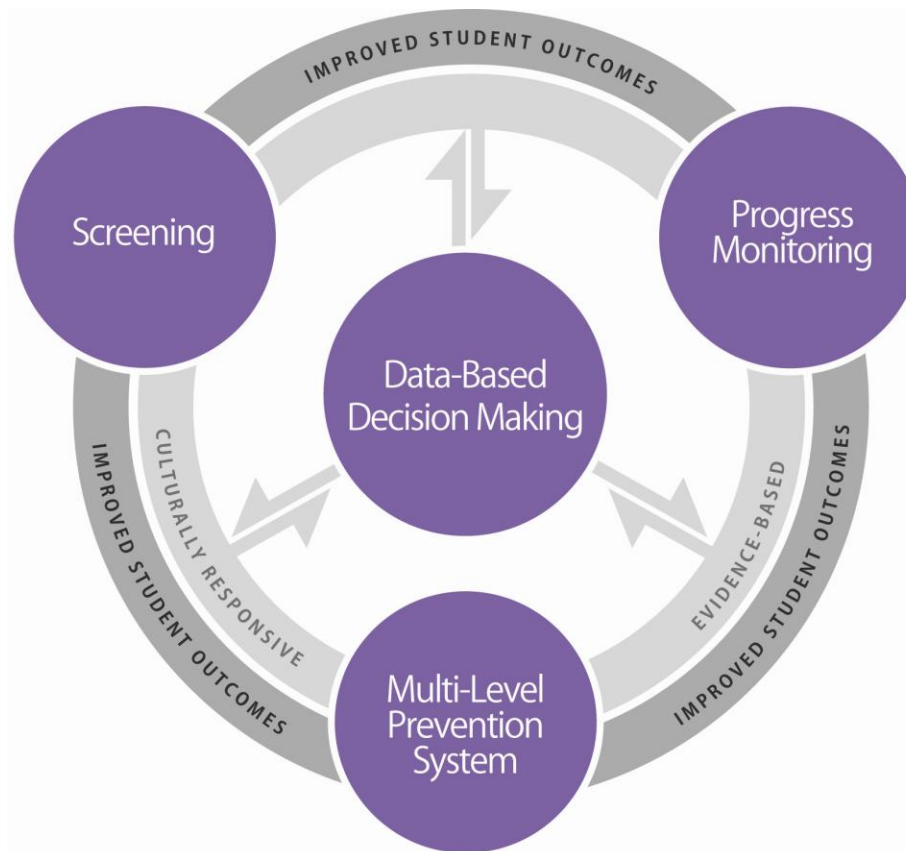
To ensure that underachievement in a child suspected of having a specific learning disability is not due to lack of appropriate instruction in reading or math, the group must consider, as part of the evaluation described in 34 CFR 300.304 through 300.306:

- 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
- 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.

([www.idea.ed.gov](http://www.idea.ed.gov))



# Essential Components of RTI



# Implementing the RTI Framework

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- Select and implement evidence-based practices and procedures
- Implement essential components and identified framework with integrity
- Ensure that cultural, linguistic, and socioeconomic factors are reflected in the RTI framework and its components



# Need More Information?

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National Center on Response to Intervention

[www.rti4success.org](http://www.rti4success.org)

RTI Action Network

[www.rtinetwork.org](http://www.rtinetwork.org)

IDEA Partnership

[www.ideapartnership.org](http://www.ideapartnership.org)



# Questions?

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# Live On-line Chat

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September 21, 2010

2:00pm Eastern Time

Submit your questions ahead of time:

[rticenter@air.org](mailto:rticenter@air.org)

To access the live on-line chat, go to [www.rti4success.org](http://www.rti4success.org) and click on “Join our Live Chat.” Note that this will not be available until 15 minutes prior to the beginning of the chat.



# National Center on Response to Intervention

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