

Overview of Multi-Tiered Systems of Support (MTSS)

South Carolina MTSS

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SOUTHEAST
Comprehensive Center
at American Institutes for Research

Welcome!

- Introductions
- Knowledge Continuum
- Participant Workbook
- Parking Lot



Agenda

Time	Activity
8:30–8:45 a.m.	Check In, Welcome, & Introductions
8:45–10:00 a.m.	Overview of the MTSS Framework and Essential Components
10:00–10:15 a.m.	Break Time
10:15–11:45 a.m.	High-Quality Tier 1 Instruction and Assessment
11:45 a.m.–12:00 p.m.	Overview of Progress Monitoring
12:00–1:15 pm	<i>Working Lunch</i> – Reflection: What Are You Doing That Fits Within This Framework?
1:15–2:30 p.m.	Instruction and Intervention Across Tiers 2 and 3 and Intensive Intervention
2:30–2:45 p.m.	Addressing Common Barriers
2:45–3:00 p.m.	Wrap Up and Evaluation

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Session Outcomes

By the end of this session, participants will be able to:

- Define Multi-Tiered Systems of Support (MTSS) and identify the four essential components of the MTSS framework.
- Discuss South Carolina's MTSS Core Principles.
- Explain why MTSS implementation is important.
- Identify best practices for instruction, intervention, and assessment across each tier of the multi-level prevention system.
- Reflect on areas of strength and improvement for district MTSS implementation and identify priorities for addressing areas of need.
- Identify next steps for implementation.

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Activator Activity: KWLQ

	What I Know	What I Want To Know	What I Learned	Questions I Still I Have
Multi-Tiered Systems of Support				



Handout
1.1

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What is MTSS?

Framework and Essential Components

What MTSS is...and What it is Not

What MTSS Is	What MTSS Is Not
A prevention framework for school improvement made up of core components and features	A program or curriculum
For all students, including those students in need of enrichment	Just for struggling students or students with disabilities
Flexible for schools and districts to customize to meet their unique circumstances	A one-size-fits-all prescriptive model
Collaborative and incorporates a team-based approach of representative stakeholders	The responsibility of one teacher or one specialist
Data driven, using multiple valid and reliable data sources	Based on assumptions or unreliable data
A framework that can be used to assist with special education decisions	Pre-referral process for special education

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Clarifying Misconceptions About MTSS

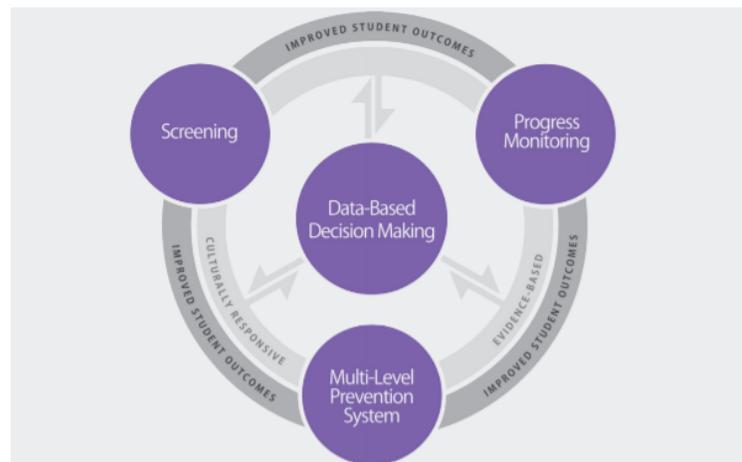
- Which of these misconceptions do you frequently encounter?
- What are some questions you have about the misconceptions?
- Which of the components do you think you have implemented best?

Handout
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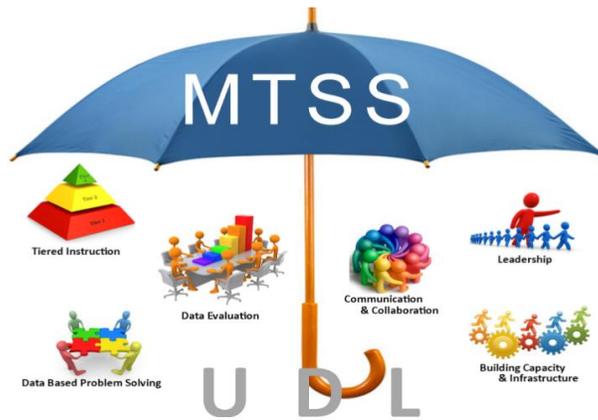
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The MTSS Framework

Essential Components of MTSS



SCMTSS Core Principles



Source: South Carolina Department of Education, 2019

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Universal Screening

What is Screening?

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The Heart of Prevention



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is grainy,
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reduced in
size.

Universal Screening

PURPOSE	Identify students who are at risk of poor learning outcomes
FOCUS	ALL students
TOOLS	Brief assessments that are valid and reliable and that demonstrate diagnostic accuracy for predicting learning or behavioral problems
TIME FRAME	Administered more than one time per year (e.g., fall, winter, spring)

Purpose of Universal Screening

- Identify students at risk for not meeting learning goals.
- Identify students who need additional assessment (i.e., progress monitoring) and instruction (i.e., Tier 2 or Tier 3).
- Provide data on the effectiveness of the core instruction and curriculum.



Focus of Screening

- Screening typically includes all students.
- Two-stage screening process includes
 - Stage 1: Universal screening
 - Stage 2: More in-depth testing or progress monitoring for students who scored at or below the cut score
- It should be an educationally valid outcome.

Screening Tools

- Must choose reliable, valid tools that demonstrate diagnostic accuracy.
- Must choose age-appropriate outcome measures that capture student ability.
- May have different screeners to assess different outcome measures.

Screening Tools Chart

				Classification Accuracy		Technical Standards		Usability Features
All	Title	Area	Grade	Admin Format	Admin & Scoring Time	Scoring Format	Types of Decision Rules	Evidence Available for Multiple Decision Rules
<input type="checkbox"/>	Children's Educational Services, Inc. (CES)	Standard Reading Passages	1	Individual	15 minutes	Manual	None	No
<input type="checkbox"/>	Children's Educational Services, Inc. (CES)	Standard Reading Passages	2	Individual	15 minutes	Manual	None	No
<input type="checkbox"/>	Children's Educational Services, Inc. (CES)	Standard Reading Passages	3	Individual	15 minutes	Manual	None	No
<input type="checkbox"/>	Children's Educational Services, Inc. (CES)	Standard Reading Passages	4	Individual	15 minutes	Manual	None	No
<input type="checkbox"/>	Children's Educational Services, Inc. (CES)	Standard Reading Passages	5	Individual	15 minutes	Manual	None	No
<input type="checkbox"/>	Children's Educational Services, Inc. (CES)	Standard Reading Passages	6	Individual	15 minutes	Manual	None	No

Source: National Center on Intensive Intervention at AIR, 2018

Establishing a Screening Process

Getting Started

- Step 1: Determining Needs, Priorities, and Logistics
- Step 2: Selecting a Screener
- Step 3: Establishing Procedures

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Step 1: Determining Needs, Priorities, and Logistics

- Outcome Measures
- Scope
- Population
- Timing
- Materials
- Funds
- Training

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Step 2: Selecting A Screener

				Classification Accuracy		Technical Standards		Usability Features
All	Title	Area	Grade	Admin Format	Admin & Scoring Time	Scoring Format	Types of Decision Rules	Evidence Available for Multiple Decision Rules
<input type="checkbox"/>	Children's Educational Services, Inc. (CES)	Standard Reading Passages	1	Individual	15 minutes	Manual	None	No
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Source: National Center on Intensive Intervention at AIR, 2018

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Step 3: Establishing Procedures

- Conducting data reviews
- Identifying the at-risk population
- Assessing efficacy of core and interventions
- Assessing progress of groups of students
- Making decisions
- Reporting and sharing data

Using Screening Data for Decision-Making

District Educational Decisions: Screening

- Program improvement and curriculum decisions
- Innovation and sustainability decisions
 - General effectiveness of implementation of the MTSS model
- Ensuring equitable services and supports across schools
 - Access to supplemental supports, access to effective instruction, and students with learning disabilities (SLD) identification
- Allocation of resources and professional development

Schoolwide Educational Decisions: Screening

- General school- and grade-level trends or issues
- Effectiveness of school-wide curriculum and instructional delivery
- Areas of need and guidance on how to set measurable school-wide goals

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Grade-Level Educational Decisions: Screening

- Specific grade-level trends or issues
- Effectiveness of grade-level curriculum and instruction
- Areas of need and guidance on how to set measurable grade-level goals
- Students who may need additional instruction or assessment

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Establishing Routines & Procedures for Data-Based Decision-Making

Teams should establish the following:

- Routines and procedures for conducting data reviews
- Decision-making processes
- Explicit decision rules for assessing student progress

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Conducting Data Reviews

- Conduct data reviews at logical, predetermined intervals.
- Schedule data reviews prior to the beginning of instruction.
- Use established meeting structures.
- Involve relevant team members.

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Examples of Explicit Decision Rules

Consider articulating, in writing, what happens when

- More than 80% of students are above the cut score
- Less than 80% have reached the cut score
- Lack of progress is evident
- Student progress varies by target group (e.g., Title I, special education, low socioeconomic status [SES])

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Display of Screening Data

ID	Name	Corrects	Errors	Accuracy	Performance Summary	Potential Instructional Action
01256	Jim	107			Established	Continue Tier I Prevention
02343	Jenny	107			Established	Continue Tier I Prevention
16705	Jackie	105			Established	Continue Tier I Prevention
02341	Jill	103			Established	Continue Tier I Prevention
-----Cutscore=102-----						
23602	Jerry	101			Established	Continue Tier I Prevention
14507	Jack	101			Established	Continue Tier I Prevention
06235	Jerome	90			Established	Continue Tier I Prevention
01267	Joann	88			Established	Continue Tier I Prevention
20002	Jared	86			Established	Continue Tier I Prevention
00012	Jason	80			Established	Continue Tier I Prevention
12325	Jeff	77			Established	Continue Tier I Prevention
02345	Jessica	77			Established	Continue Tier I Prevention
01384	Jen	74			Established	Continue Tier I Prevention
04312	Jim	72			Established	Continue Tier I Prevention
08752	Jeremy	71			Established	Continue Tier I Prevention
Emerging > 70						
14562	Jackson	69			Emerging	Assess and Consider Tier II Prevention
09873	Jessie	69			Emerging	Assess and Consider Tier II Prevention
05631	Jillian	60			Emerging	Assess and Consider Tier II Prevention
02344	Juanita	57			Emerging	Assess and Consider Tier II Prevention
12074	Jacklyn	55			Emerging	Assess and Consider Tier II Prevention
13551	Janet	53			Emerging	Assess and Consider Tier II Prevention
Deficient > 46						
01834	Jade	43			Deficient	Assess and Consider Need for Tier III Prevention
23515	James	39			Deficient	Assess and Consider Need for Tier III Prevention
22145	Jed	31			Deficient	Assess and Consider Need for Tier III Prevention

Access to supplemental supports may be based on school resources

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Decisions for Group Discussion

What would you do if:

- More than 80% of students are above cut score?
- Less than 80% have reached the cut score:
 - Would you strengthen the core instruction and curriculum?
 - Would you add an intervention?
- Student screening data varies by target group (e.g., Title I, special education, low SES)?

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Multi-Level Prevention System Tier 1, Tier 2, Tier 3

Essential Components



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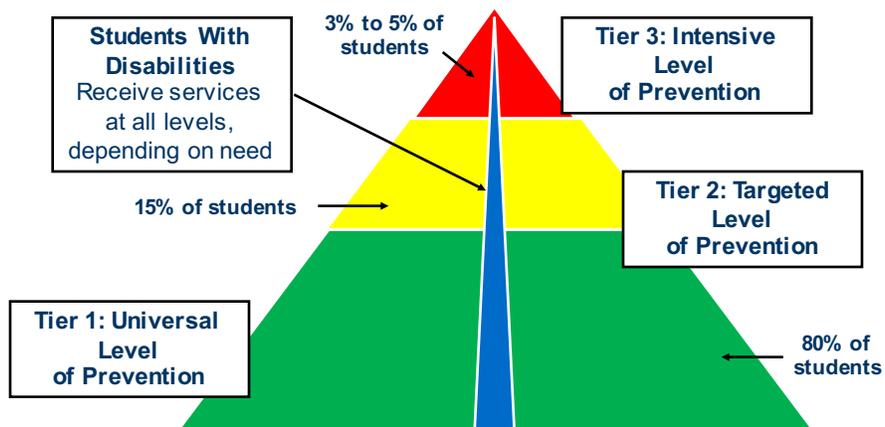
A Systematic Approach

- Designed to give students more opportunities to learn targeted skills
- All 3 tiers are interrelated and preventative:
 - Tier 1 is the foundation for the system.
 - Progression through tiers is not necessary.
 - Alignment across tiers is critical—skills should be reinforced throughout.

Three Tiers of Prevention and Intervention

	Tier 1	Tier 2	Tier 3
Instruction or Intervention Approach	Comprehensive, research-based curriculum	Standardized, targeted small-group instruction	Individualized, based on student data
Group Size	Classwide (with some small-group instruction)	3-7 students	No more than 3 students
Assessment	Screening, 3 times per year	At least biweekly or monthly	Weekly
Population Served	All students	Students identified as at risk (~15%-20%)	Significant and persistent learning needs, nonresponders (3%-5%)

Multi-level Prevention System



High Quality Tier 1 Instruction and Assessment

Tier 1 Characteristics

Focus	Instruction	Setting	Assessment
All students (including students with disabilities and learning differences)	District core curriculum and instructional practices that are research-based and aligned with state or district standards, and that incorporate <i>differentiated instruction</i>	General education classroom	Screening, continuous progress monitoring, and outcome measures or summative assessments

Critical Features of Tier 1 Instruction

- ✓ Use of research-based curriculum materials
- ✓ Articulation of teaching and learning (in and across grade levels)
- ✓ Consistent use of differentiated instruction
- ✓ Instruction aligned with state standards
- ✓ Inclusion of students with disabilities and those exceeding benchmark

✓ Use Research-Based Curriculum Materials

- Across all subjects and school-wide behavior supports
- Components have been researched and found to be generally effective
- Curriculum materials have not been rigorously evaluated as a package

WWC What Works Clearinghouse

Contact the Vendor for Research Reports



Evidence Standards

Tier 1 Research-Based Curricula

- Recommended for the core, across subjects.
- Components have been researched and found to be generally effective.
- Curriculum materials have not been rigorously evaluated as a package.

Evidence-Based Intervention

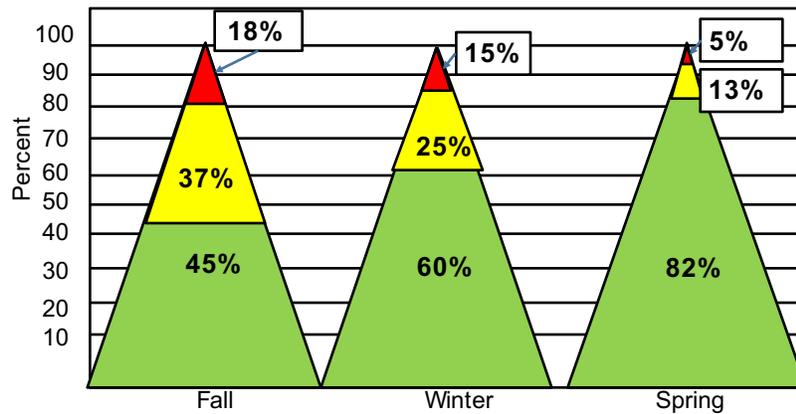
- Recommended for Tier 2 and Tier 3
- Materials evaluated using rigorous research design
- Evidence of positive effects for students who received the intervention

✓ Ensure Articulation of Teaching and Learning (In and Across Grade Levels)

Teaching and learning objectives are well articulated

- From one grade to another
- *Within* grade levels so that students have highly similar experiences, regardless of their assigned teacher

Data-Based Decision-Making: Evidence of Tier 1 Effectiveness Within and Across Grade Levels



✓ Consistent Use of Differentiated Instruction

- Teachers in the school differentiate instruction for students on, below, or above grade level.
- Most teachers in the school use student data to identify and address the needs of students.
- Differentiation principles:
 - Ongoing assessment
 - Flexible grouping
 - Data-based instructional planning



What Are Differentiated Learning Activities?

Differentiation involves:

- Mixed instructional groupings
- Team teaching
- Peer tutoring
- Learning centers
- Accommodations to ensure that all students have access to the instructional program



Differentiation is *not* the same as providing more intensive interventions to students with learning disabilities.

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Differentiated Instruction

• Using assessment data to inform instruction	NOT	Administering assessments and just reporting results
• Teaching targeted small groups	NOT	Using only whole class instruction
• Using flexible grouping	NOT	Using small groups that never change
• Matching instructional materials to student ability	NOT	Using the same reading text with all students
• Tailoring instruction to address student needs	NOT	Using the same assignments for the entire class

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✓ Aligned with State Standards

The core curriculum (reading and mathematics)

- Aligned with the College and Career Standards or other state standards.
- Usually mandatory for all students of a school or a school system
- Often instituted at the elementary and secondary school levels by local school boards, departments of education, or other administrative agencies charged with overseeing education

✓ Inclusion of Students Exceeding Benchmark

- Schools provide enrichment opportunities for students exceeding benchmarks.
- Educators implement those opportunities consistently in all classes and grade levels.

✓ Inclusion of Struggling Students and Students with Disabilities

- Schools provide differentiation of instruction, accommodations, and modifications to ensure struggling students, including those with disabilities, benefit from core instruction.
- These supports are consistently offered across all classes and grade levels.

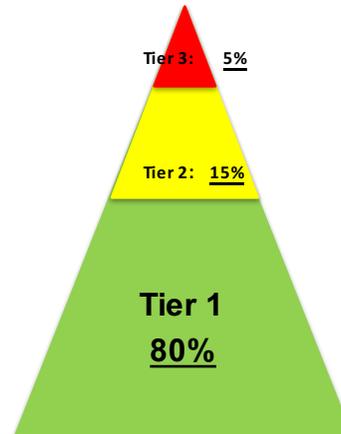
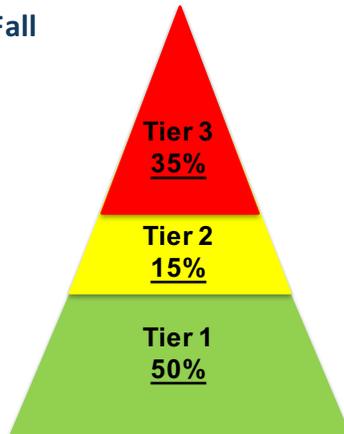
Intensifying Instruction at Tier 1

Why Intensify Tier 1 Instruction?

4th Grade

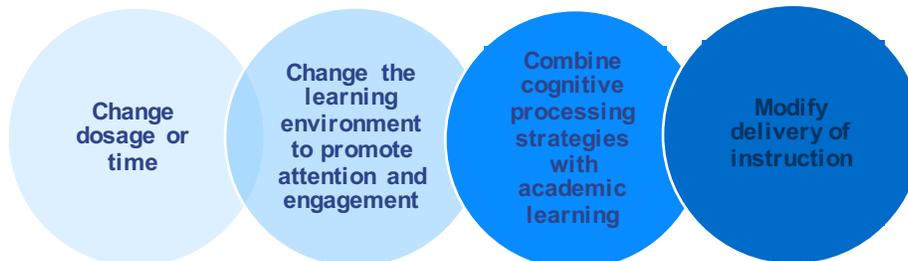
Expectation

Fall



Prioritize Students for Support and Differentiation in Tier 1

- **Examine and strengthen Tier 1** curriculum when less than 80% of students in the grade level are at or above the benchmark score.
- **How?**
 - **Intensify** instruction using **evidence-based practices** and **class-wide intervention programs**.



Activator Activity

What do you believe are the most important practices teachers need in order to implement Tier 1 (core) instruction?



Handout
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Reflection: Multi Level Prevention System

Are your intervention programs research based?

Is your core instruction meeting the needs of at least 80% of your students?

Have those providing instruction had appropriate training to ensure success?

Tier 1 High-Leverage Practices



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High-Leverage Practices (HLPs)

- Set of practices that:
 - Support student learning
 - Can be taught, learned, and implemented
- Applicable to the everyday work of teachers:
 - Fundamental to effective teaching
 - Used frequently
 - Cut across content domains and grade levels
 - Supported by research or have a strong legal foundation



Source: McLeskey & Brownell, 2015; Windschitl et al., 2012

HLP #16: Explicit Instruction

- Showing and telling students what to do or think while solving problems, enacting strategies, completing tasks, and classifying concepts
- Strategic use of examples and non-examples
- Modeling and scaffolding steps and processes



Explicit Instruction

- Nothing is left to chance; all skills are taught directly.
- Student practice activities are carefully guided with instructive error correction.
- Practice activities are carefully engineered to produce mastery.
- Critical skills are developed through carefully monitored instruction, and the focus is on mastery.

HLP #16: Explicit Instruction

After watching this video example, what features of explicit instruction did you see?

<https://highleveragepractices.org/701-2/>



Systematic Instruction

- Lessons and activities are divided into sequential, manageable steps.
- Concepts and tasks progress from simple to more complex
- Concepts and skills are explicitly defined, and order of introduction follows a preplanned sequence.

The Role of Practice

- Provide lots of opportunities for practice.
- Students need extended practice over time.
- Remember, what is practiced becomes a habit.



**Feedback is critical!
Don't allow students to
practice their mistakes!**

High-Leverage Practices Expert Activity

- Read about your assigned high-leverage practice(s).
- Prepare two to three key points and an implementation consideration related to your HLP(s) to share with a larger group.



Handout
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Quick Turn & Talk: Reflect

- How often do you see high-leverage practices used in classrooms you observe?
- Share an example of one practice you observe frequently.
- Share an example of one practice you would like to observe more frequently.



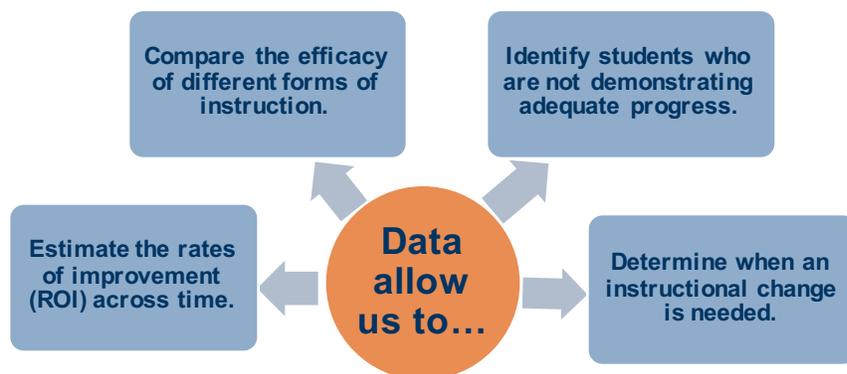
Progress Monitoring

Essential Component

Progress Monitoring

Purpose	Monitor students' response to Tier 1, Tier 2, or Tier 3 instruction 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 of not meeting learning outcomes.
Tools	Brief assessments that are valid, reliable, and evidence-based
Time Frame	Students are assessed at regular intervals (e.g., weekly, biweekly, or monthly)

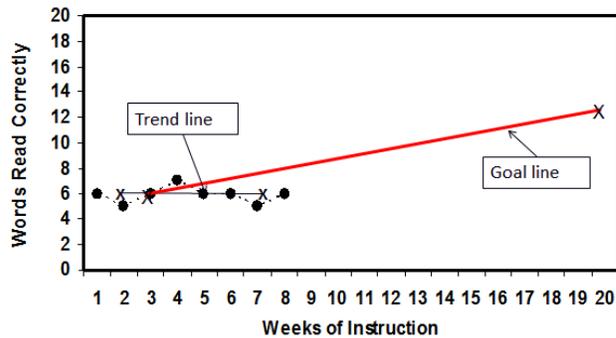
Why Progress Monitor?



Source: Center on Response to Intervention, 2010

Progress Monitoring: What This Looks Like

Collect and graph data to support decisions about a student's responsiveness to intervention



Source: National Center on Intensive Intervention, 2012

Progress Monitoring Answers These Questions...

Are students meeting short-term goals that will help them reach their long-term goals?

Are teachers making decisions based on progress monitoring data?

Are students making progress at acceptable rates?

Should instruction be adjusted or changed?

Working Lunch

Complete –

- MTSS Implementation: Reflection and Action Planning Sheet
- Go through each section and determine your status.

Instruction and Intervention Across the Tiers

Evidence-Based Tier 2 Intervention

Tier 2 Within MTSS

	Tier 1	Tier 2	Tier 3
Instruction or Intervention Approach	Comprehensive, research-based curriculum	Standardized, targeted small-group instruction	Individualized, based on student data
Group Size	Classwide (with some small-group instruction)	3-7 students	No more than 3 students
Assessment	Screening, 3 times yearly	At least biweekly or monthly	Weekly
Population Served	All students	Students identified as at risk (~15%-20%)	Significant and persistent learning needs, non-responders (3%-5%)

Four Critical Features of Tier 2

1. Uses **evidence-based interventions** that support academic and behavior needs
2. Complements core academic and behavior instruction/program
3. Uses **standardized interventions with appropriate dosage and grouping size** delivered by trained personnel with fidelity
4. Scheduled in addition to Tier 1



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Disclaimer

There is not a single evidence-based practice or intervention that works for every student.

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Elements of Evidence-Based Interventions

1. **Designed Based on Intervention Taxonomy**

2. Fidelity

- a) Adherence
- b) Student Engagement
- c) Program Specificity
- d) Quality of Delivery
- e) Exposure

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Taxonomy of Intervention Intensity

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Dimensions to consider:

- 1. Strength
- 2. Dosage
- 3. Alignment
- 4. Attention to transfer
- 5. Comprehensiveness
- 6. Behavioral or academic support
- 7. Individualization*



The Taxonomy of Intervention Intensity

Lynn S. Fuchs, Douglas Fuchs, and Amelia S. Malone

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Taxonomy of Intervention Intensity

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The *Taxonomy of Intervention Intensity** was developed based on existing research to support educators in evaluating and building intervention intensity.

Dimensions*	Description
Strength	How well the program works for students with intensive intervention needs, expressed in terms of effect sizes. Effect sizes of above .25 indicate an intervention has value in improving outcomes. Effect sizes of 0.35 to 0.40 are moderate; effect sizes of 0.50 or larger are strong (preferred).
Dosage	The number of opportunities a student has to respond and receive corrective feedback. It refers to the size of the instructional group, the number of minutes each session lasts, and the number of sessions provided per week.
Alignment	How well the program (a) addresses the target student's full set of academic skill deficits, (b) does <i>not</i> address skills the target student has already mastered (extraneous skills for that student), and (c) incorporates a meaningful focus on grade-appropriate curricular standards.
Attention to transfer	The extent to which an intervention is designed to help students (a) transfer the skills they learn to other formats and contexts and (b) realize connections between mastered and related skills.
Comprehensiveness	The number of explicit instruction principles the intervention incorporates (e.g., providing explanations in simple, direct language; modeling efficient solution strategies instead of expecting students to discover strategies on their own; providing practice so students use the strategies to generate many correct responses; and incorporating systematic cumulative review).
Behavioral support	The extent to which the program incorporates (a) self-regulation and executive function components and (b) behavioral principles to minimize nonproductive behavior.
Individualization	A validated, data-based process for individualizing intervention, in which the educator systematically adjusts the intervention over time, in response to ongoing progress-monitoring data, to address the student's complex learning needs.

*Fuchs, L.S., Fuchs, D. & Malone, A.S. (2017). The Taxonomy of Intervention Intensity. *TEACHING Exceptional Children*, 50(1), 35–43.

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Key Considerations When Selecting Evidence-Based Interventions

- ✓ Does evidence suggest the intervention is expected to lead to improved outcomes (*strength*)?
- ✓ Will the group size, duration, and frequency provide sufficient opportunities to respond (*dosage*)?
- ✓ Does the intervention match to the student's identified needs (*alignment*)?
- ✓ Does it assist the student in generalizing the learned skills to general education or other tasks (*attention to transfer*)?
- ✓ Does the intervention include elements of explicit instruction (*comprehensiveness*)?
- ✓ Does the student have opportunities to develop the behavior skills necessary to be successful (*behavioral support*)?

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Resources for Evaluating Evidence Base of Practices and Standardized Interventions

NCII Interventions Tools Chart

<http://www.intensiveintervention.org/chart/instructional-intervention-tools>

What Works Clearinghouse

<http://ies.ed.gov/ncee/wwc/findwhatworks.aspx>

Best Evidence Encyclopedia

<http://www.bestevidence.org/>

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What If Evidence-Based Interventions Aren't Available?

Use them when available and consider augmenting current offerings, if feasible.

Also consider:

- Remediation materials that came with your core program materials
- Expert recommendations (if evidence-based programs are not available)
- Standards-aligned materials

What Should I Do If the Evidence-Based Intervention Isn't Working...for Most Students?

- ✓ Ensure implementation fidelity.
- ✓ Ensure a match between the intervention outcomes and student needs.
- ✓ Ensure staff are adequately trained to deliver the interventions.
- ✓ Change the intervention!
- ✓ **Make adaptation for all students using the Taxonomy of Intervention Intensity.**
- ✓ Select a new intervention.

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Elements of Validated Interventions

1. Designed Based on Intervention Taxonomy
2. **Fidelity**

THINK-PAIR-SHARE

What do you think of when you hear the word "fidelity"?
How do most people in your district define fidelity?

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What Is Fidelity?

- Degree to which the program is implemented the way intended

What happens if you adapt an intervention?

- Fidelity refers to the extent to which you implement the intervention adaptation as designed.
- Maintain fidelity to the process.

Source: Gersten et al., 2004; Mellard & Johnson, 2007; Sanetti & Kratochwill, 2009

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Why Is Fidelity Important?

- Ensures that instruction has been implemented as intended.
- Allows us to link student outcomes to instruction.
- Helps in the determination of intervention effectiveness and instructional decision-making.
- Positive student outcomes depend on level of fidelity of intervention implementation.

Source: Pierangelo & Giuliani, 2008

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Progress Monitoring Answers These Questions...

Are students meeting short-term goals that will help them reach their long-term goals?

Are teachers making decisions based on progress monitoring data?

Are students making progress at acceptable rates?

Should instruction be adjusted or changed?

Progress Monitoring

- Are students meeting short-term goals that will help them reach their long-term goals?
- Are students making progress at acceptable rates?
- Should instruction be adjusted or changed?

Data-Based Decision-Making

Essential Component

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Data-Based Decision-Making: The Basics

- Data are used to compare and contrast the adequacy of the core curriculum and the effectiveness of different instructional and behavioral strategies.
- Explicit decision rules and processes are used for assessing student progress (e.g., state and district benchmarks, level and/or rate).



Data-Based Decision-Making Checklist

- Analyze data at all levels of MTSS:
 - Implementation (e.g., state, district, school, grade level)
 - Prevention (i.e., primary, secondary, or tertiary)
- Establish routines and procedures for making decisions.
- Set explicit decision rules.
- Use data to evaluate effectiveness of:
 - Core curriculum
 - Instructional and behavioral strategies

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Reflection: Data-Based Decision-Making

Does your district have a system in place for analyzing screening data?

Does your district have a system in place for analyzing progress monitoring data?

Does your district provide guidance to schools in order to make decisions?



Tier 3 Intensive Intervention

Thinking About Intervention Tiers

	Tier 1	Tier 2	Tier 3
Instruction/ Intervention Approach	Comprehensive research-based curriculum	Standardized, targeted small-group instruction	Individualized, based on student data
Group Size	Class-wide (with some small-group instruction)	3–7 students	No more than 3 students
Monitor Progress	Screening, 3x per year	At least 1x per month	Weekly
Population Served	All students	At-risk students	Significant and persistent learning needs

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Tier 3 Intensive Intervention

Focus	Instruction	Setting	Assessment
Students who have not responded to core- and supplemental intervention (Tier 2)	Intensive intervention (Tier 3) delivered to small groups (two or three students) or individually	Intervention classroom, other general education location within the school	Progress monitoring and diagnostic

What is Intensive Intervention?

Intensive intervention is designed to address severe and persistent learning or behavior difficulties. Intensive interventions should be:

- (a) Driven by data
- (b) Characterized by increased intensity (e.g., smaller group, expanded time) and individualization of academic instruction and/or behavioral supports

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Tier 3 Intensive Intervention

- Includes evidence-based methods for individualizing instruction.
- Is more intense than Tier 2 (longer and more frequent).
- Requires implementation fidelity.
- Is delivered by well-trained or specialized staff in optimal group sizes.
- Includes decisions based on valid and reliable data and criteria implemented accurately.
- Addresses general education curriculum in an appropriate manner for students.

What Intensive Intervention ...

Is

- *Individualized based on student needs*
- *More intense, often with substantively different content AND pedagogy*
- *Composed of more frequent and precise progress monitoring*

Is Not

- *A single approach*
- *A manual*
- *A pre-set program*
- *More of the same Tier 1 instruction*
- *More of the same Tier 2 instruction*

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Who Needs Tier 3 Intensive Intervention?

- Students with disabilities who are not making adequate progress in their current instructional program
- Students who present with very low academic achievement and/or high-intensity or high-frequency behavior problems (typically those with disabilities)
- Students in a tiered intervention program who have not responded to Tier 2 intervention programs delivered with fidelity

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Fidelity at Tier 2 Versus Tier 3

Tier 2: Degree to which the program is implemented the way intended by program developer

Tier 3: Degree to which the program is implemented the way it was designed or adapted based on data and fidelity to the Tier 3 data decision-making process

Source: Gersten et al., 2005; Mellard & Johnson, 2007; Sanetti & Kratochwill, 2009

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Tier 3 and Special Education

Tier 3 is the most intense level of **prevention**.

The structure of Tier 3 is based on your schools' decision rules.

A bit of guidance....

- Decision rules should be in place prior to intervention implementation.
- Schools should use decision rules to determine when students are responding to intervention or needing more intense intervention (Tier 3).
- When a disability is suspected, student should be referred for special education services.

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Progress Monitoring

- Are students meeting short-term goals that will help them reach their long-term goals?
- Are students making progress at acceptable rates?
- Should instruction be adjusted or changed?

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Approach to Tier 3 Intensive Intervention: Data-Based Individualization (DBI)

Data-Based Individualization (DBI) is a systematic method for using data to determine when and how to provide more intensive intervention.

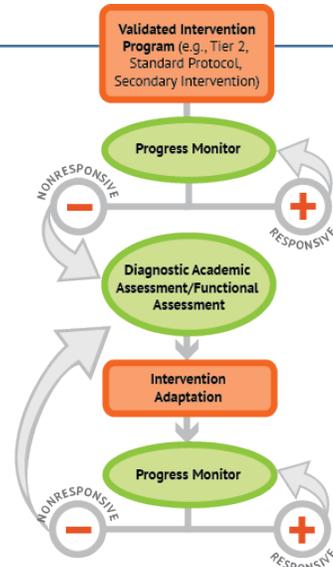
- DBI is a process, not a single intervention program or strategy.
- Not a one-time fix—ongoing process comprising intervention and assessment adjusted over time.

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Five DBI Steps

1. Tier 2 intervention program, delivered with greater intensity
2. Progress monitoring
3. Informal diagnostic assessment
4. Adaptation
5. Continued progress monitoring, with adaptations occurring whenever needed to ensure adequate progress

Handout
1.6



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Intensive Intervention Practices

Practice 1: Change Dosage or Time

Practice 1: Change Dosage or Time

Methods for increasing quantity of instruction:

- Minutes per day
- Minutes per session
- Sessions per week
- Total number of sessions

How should I use the additional time in intervention?



Use the additional time to accelerate learning by:

- Maximizing engaged learning time
- Minimizing waiting and transitions
- Teaching additional skills and strategies
- Providing additional practice opportunities with feedback
- Delivering more explicit, systematic (step-by-step) instruction
- Monitoring student progress to ensure that the additional learning time increases student mastery of skills.

Strategies for Adding Intervention Time

- Double dip
- Use entry or exit routines
- Reinforce independent use of routines

Strategies for Adding Intervention Time

- **Sample entry routine:**

Student comes into the classroom, gets a timer, and does practice with math facts, writing down the scores on a recording sheet.

- **Sample exit routine:**

Student finishes the lesson and does an oral reading fluency practice, either alone or with a partner.

**Practice 2: Change
the Learning
Environment to
Promote Attention
and Engagement**

Practice 2: Change the Learning Environment to Promote Attention and Engagement

- Reduce group size.
- Group students with similar needs.
- Change the instructional setting to reduce noise and other distractions and promote academic engagement.

What is the ideal group size for providing intervention?

- Small groups, up to four students, may provide the most intensive intervention at the elementary level.
- Research has not identified one ideal intervention group size that increases outcomes for all or most students, particularly in older students in Grades 6–12.

Practice 3: Combine Cognitive Processing Strategies With Academic Learning

What are cognitive processes?

- Cognitive processes comprise various mental activities that direct thinking and learning.
- Students with intensive needs often have challenges with processes related to executive function and self-regulation:
 - Memory
 - Attribution
 - Attention
 - Strategies to set and monitor learning goals

Considerations When Designing Intensive Intervention

Academic interventions also should support cognitive processes such as:

- Memory
- Self-regulation and self-monitoring
- Attribution
- Attention

How does poor memory impede academic success?

Students with memory problems may have difficulty recalling:

- A sentence or description they just read
- Components of a multi-step math problem
- Steps in a sequence (e.g., math operations, independent work, organizational routines)
- Multi-step directions
- Previous learning that relates to new information
- Information presented in one modality (e.g., auditory only)

Source: Swanson, Zheng, & Jerman, 2009

Indicators That a Student Struggles With Poor Memory

- Low scores for digit span or other measures of working memory on cognitive assessments.
- Frequently forgetting steps in a process or routine, or requiring more prompting than peers.
- Need for repeated presentation of new material in order to remember it.
- Not recalling information taught during the previous lesson/day/week (depending on context).
- Gets lost easily.

What practices help students reduce the impact of poor memory while engaged in academic learning?

Teach Strategies for Taking Notes and Organizing Information



Teach students to write down assignments and include in daily routines.



Use graphic organizers and key words and phrases for notes.



Teach students to ask for help if they need information repeated.

Present Information Using More Than One Modality



- Speak and write, draw, and project information as you present it.
- Repeat important instructions, key words, etc.
- Model procedures to provide students with a visual image of the steps.
- Teach students to visualize information in text, including stories, word problems, etc.

Teach Routines for Important Procedures

1. Get your coat and backpack.	
2. Pick up your sack lunch in the hall bin.	
3. Check your mailbox.	
4. Put papers in your accordion folder.	

- Use consistent routines.
- Provide a cue sheet/poster for multistep processes.
- Review steps regularly reteach as needed.

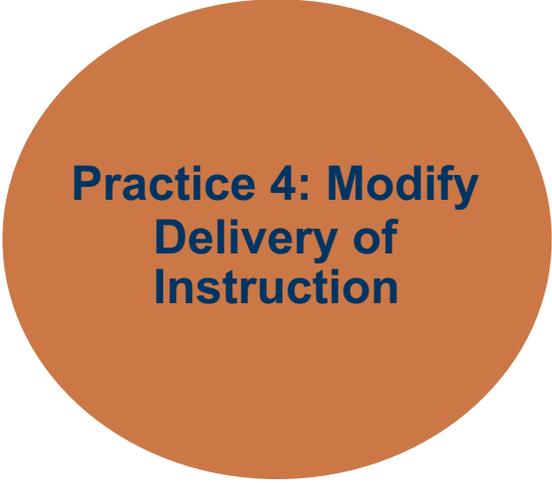
Review Prior Learning Before Presenting New Information

Have students:

- Retell information from the previous lesson.
- Summarize key points using just a few words or phrases.
- Predict or explain how the new information may relate to prior learning.

Other Strategies

- Model out loud verbal rehearsal of what students need to remember.
- Develop a mnemonic device.
- Use visual or verbal cues as reminders.
- Check for understanding frequently.



Practice 4: Modify Delivery of Instruction

Modifying Delivery of Instruction

1. Consideration of the instructional match and prioritization of skills to teach
2. Systematic Instruction
3. Explicit Instruction
4. Precise, simple, and replicable language
5. Frequent opportunities for student response
6. Specific feedback and error correction procedures
7. Opportunities for practice, development of fluency, and review

1. Instructional Match and Prioritizing Skills

- Prioritize what you want them to know.
- Maximize learning time by ensuring that instructional content aligns with students' demonstrated needs.
- Use precise, frequent progress monitoring to determine if learning is occurring.



2. Systematic Instruction

Break down complex skills into smaller, manageable “chunks” of learning and carefully consider how to best teach discrete pieces to achieve the overall learning goal.

- Prioritize and sequence learning chunks from easier to more difficult.
- Use scaffolding.
- Provide temporary supports to control the level of difficulty throughout the learning process.

“But we have to teach to the standards.”

- Standards specify what students should know, not how to teach them.
- You should prioritize what standards to teach (Gersten et al., 2009).
- You can provide standards-relevant instruction across levels of cognitive and adaptive functioning.

3. Explicit Instruction

- Overtly teach the steps or processes needed to understand a construct, apply a strategy, and/or complete a task.
- It's often used for:
 - Teacher-led instruction of new skills
 - Teaching students to apply generalized knowledge or skills to novel settings
 - Addressing learning needs, including strategies to support cognitive processing

Components of Explicit Instruction

1. Tell students what you want them to know.
2. Provide an advance organizer.
3. Assess background knowledge.
4. Model ("I do").
5. Provide guided practice ("We do").
6. Provide independent practice ("You do").
7. Check for maintenance.

Note: *Although there are no specific guidelines for this, the bulk of the instruction should fall within the guided practice phase.*

How can I make instruction more explicit and systematic?

- Organize instruction to allow for high levels of student success—start with easy tasks.
- Break tasks into smaller, simpler steps.
- Provide:
 - More modeling with clearer explanations
 - More concrete learning opportunities
 - Temporary support and gradually it reduce over time
 - More opportunities for response, practice, and feedback

4. Using Precise, Simple, and Replicable Language

- Develop specific language for the parts of lessons that involve explaining a very important idea.
- Use correct vocabulary for the discipline, as appropriate, such as:
 - Math: divisor, addend
 - Science: waxing gibbous moon, chrysalis
 - English: protagonist, conflict

Note: Make sure you say it the same way every time.

Precise, Simple, Replicable Language

Too long

The letter *c* can make two different sounds. Sometimes it will say /k/. This happens when it is followed by *a*, *o*, *u*, or any consonant except *h*. In other cases, *c* makes the /s/ sound, when it comes before *e*, *i*, or *y*.

- Same idea repeated multiple ways
- Too much detail

Shorter

C makes the /k/ sound before *a*, *o*, *u*. *C* makes the /s/ sound before *e*, *i*, and *y*.

- Language repeats
- Appropriate level of detail
- Still slightly confusing
- Could still be shorter

Precise, Simple, Replicable Language

C says /k/ in front of *a*, *o*, *u*. It says /s/ in front of *e*, *i*, and *y*.

- Short
- Pretty clear (will need further instruction, which is the whole reason we teach!)
- Same language used

5/6. Why provide frequent opportunities for student practice with feedback?

- Frequent student response can assist the teacher in monitoring student understanding.
- Teacher feedback during student practice can be a powerful tool for refining and mastering new skills.
- Feedback prompts students to continue successful practice.
- Quick corrections prevent students from practicing errors.

Comment:
Not sure what "5" in header is for.

6. What is the most effective type of feedback?

- Feedback should be:
 - Clear and precise
 - Specific
 - Tied directly to the student's actions

Comment: Not sure what "6." in header is for.

6. What is the most effective type of feedback?

When a student makes errors, always:

- Explain why the answer was incorrect.
- Model the correct response.
- Have the student provide a correct response before moving on.
- Recheck later in the lesson/activity.

Comment: Not sure what “6.” in header is for.

What is the best time to offer feedback?

- Immediately for discrete tasks (e.g., solving a math fact, spelling a word)
- After a short delay for more complex tasks (e.g., writing a paragraph) to allow students to think through the process
- Timely feedback can:
 - Prevent inaccurate practice.
 - Increase the rate of student mastery.
 - Ensure successful, efficient learning.



Sample Error Correction Script

Student: $3 + 3$ equals 5.

Teacher: That's not quite right, watch me. If I start with 3 fingers and count 3 more fingers (demonstrate), 4, 5, 6, I get 6 (show fingers). So, $3 + 3$ equals 6 (pause). What does $3 + 3$ equal?

Student: 6

Teacher: That's right, $3 + 3 = 6$. Let's try another problem. (After a few more problems, go back to $3 + 3$ and have the student provide the answer.)

7. How should practice take place in an intervention?

Comment: Not sure what "7." in header is for.

- **Guided practice:** after you have modeled a new skill or strategy
- **Independent practice:**
 - Incorporated after students begin to demonstrate mastery of the new skills or content
 - Does not substitute for explicit and systematic instruction and guided practice



7. How should practice take place in an intervention?

- Incorporate daily practice routines at the beginning and/or end of an intervention period.
- Give homework that facilitates practice, not learning new information.
- Reinforce on-task behavior during independent practice.

Comment: Not sure what "7." in header is for.



Addressing Common Barriers to Implementing Intensive Intervention

“I don’t have time for this. ...There are too many students.”

- Choose intervention changes that are feasible to implement and maintain.
- Decide that intensive intervention is a priority for the 3–5% of students who need it. This requires buy-in from staff as well as school and district leadership.
- If significantly more students appear to need intensive intervention, consider parallel changes to core and secondary (Tier 2) instruction/intervention.
- Do not overburden your system by trying to serve significantly more than 3–5% of students at this level of intervention.

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“But we don’t teach Program X to Yth graders.”

- Instruction that does not align with students’ needs is not likely to benefit them.
- Plan to make exceptions to scheduling and grouping policies for these students when data suggest they require it.
- Collect progress monitoring data, and review it regularly to determine if the student is benefiting from his or her intensified program.

“That’s not my job.”

- State and federal accountability measures require that **all** students make progress toward standards.
- Given the range of needs in general education classrooms, intensive intervention is unlikely to be successful if left to classroom teachers alone—they will need support.
- Identify interventionists (e.g., special education teachers, reading or math specialists) to support students throughout the building.
- Use flexible scheduling and staff allocation strategies to allow interventionists to serve a variety of students. Visit <http://www.rti4success.org> for resources.

“I don’t know what to do if the intervention isn’t working.”

- Revisit this presentation and the references listed.
- Make sure you monitor progress at an appropriate level.
- Collect additional diagnostic data to determine specific skill deficits.
- Consider integrating behavior or motivation strategies with academic instruction.
- Meet regularly with your team to identify and refine intervention strategies.

Case Example

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Case Example: Sandy

Sandy is a sixth-grade student with an individual education program (IEP) for a specific learning disability.

Sandy struggles with mathematics and has recently begun struggling with fluency, performing on timed tests, and consistency on mastery assessments.

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Intervention History: Sandy

- Sandy receives Corrective Mathematics in a small-group setting with three other students, five times a week, 50 minutes each session.
- On her current IEP, there are no behavioral goals.

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Sandy's Current Performance

Initial data collection and analysis revealed the following:

- An error analysis revealed errors on mathematics concepts she had previously demonstrated mastery in, including long division skills.
- Teachers predict Sandy is struggling with the increased length and intensity of mathematics assessments in sixth grade.

Sandy has started to demonstrate off-task behaviors and high levels of distractibility:

- In the late afternoon, final periods of the day, during unstructured time

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Intervention Adaptation 1

The intervention team met and made the following decisions about Sandy's intervention:

- Decrease the number of students in intervention.
- Break lengthy mathematics assignments and assessments into smaller chunks to avoid issues with stamina and distractibility.
- Move Sandy into a mathematics intervention period earlier in the school day to help with distractibility.
- Provide increased feedback and opportunities to practice, especially with long division problems.

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Intervention Adaptation 2

Sandy's teachers met and decide to:

- Continue her intensified math intervention.
- Make the following adaptations to include a behavioral component:
 - Add a self-regulation component to the intervention to be tracked by Sandy.
 - Add weekly check-ins with Sandy and her intervention teacher to assess behavior progress monitoring data.

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Summary



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Activator Activity: KWLQ

	What I Know	What I Want to Know	What I Learned	Questions I Still I Have
Multi-Tiered Systems of Support				

Handout
1.1



Resources

1. CEEDAR Center
<https://ceedar.education.ufl.edu>
2. Center on the Social and Emotional Foundations for Early Learning
<http://csefel.vanderbilt.edu>
3. High-Leverage Practices in Special Education
<https://highleveragepractices.org>
4. IDEA Partnership
www.ideapartnership.org
5. National Center on Intensive Intervention at American Institutes for Research
<https://intensiveintervention.org>
6. National Center for Pyramid Model Innovations
<https://challengingbehavior.cbcs.usf.edu>
7. National Center for Systemic Improvement (NCSI)
<https://ncsi.wested.org>

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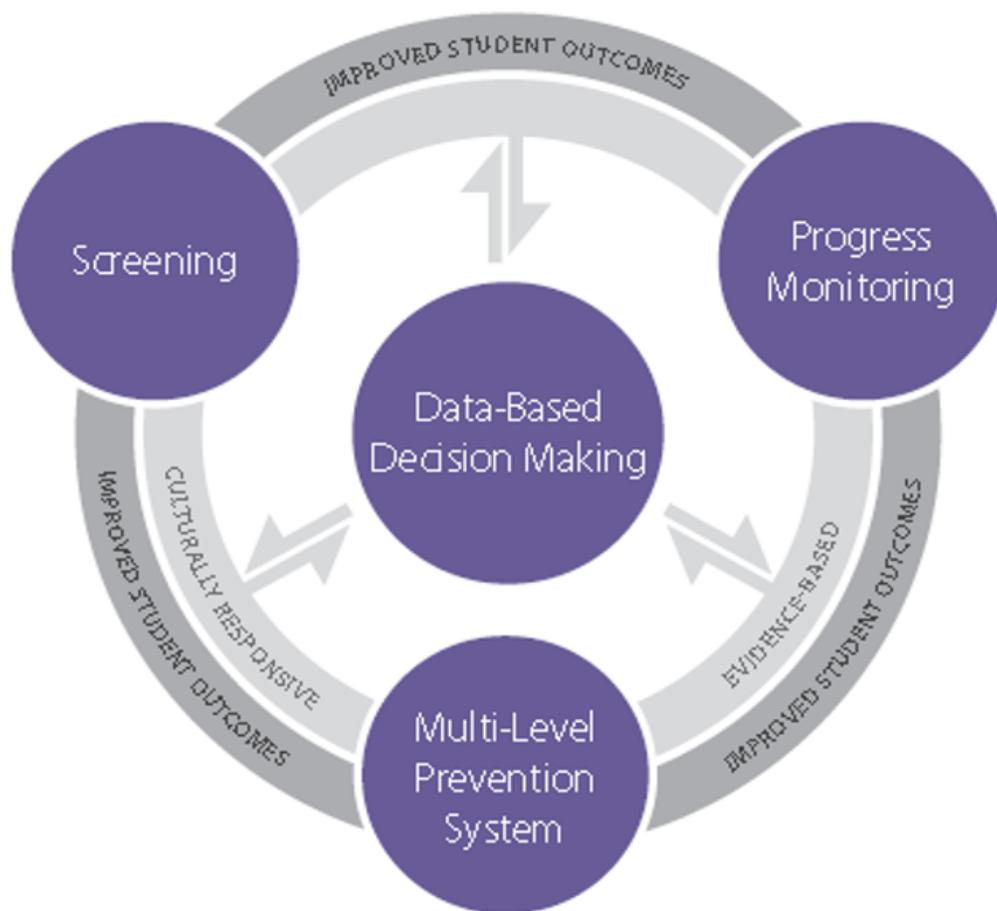


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Multi-Tiered Systems of Support (MTSS) Implementation

Participant Workbook



Handout 1.1: Activator Activity

	What I Know	What I Want to Know	What I Want to Learn	Questions I Still Have
Multi-Tiered Systems of Support (MTSS)				

Handout 1.2: Clarifying MTSS Misconceptions

What MTSS is	What MTSS is not
A prevention framework for school improvement made up of core components and features	A program or curriculum
For all students, including those students in need of enrichment	Just for struggling students or students with disabilities
Flexible for schools and districts to customize to meet their unique circumstances	A one-size-fits-all prescriptive model
Collaborative and incorporates a team-based approach of representative stakeholders	The responsibility of one teacher or one specialist
Data driven, using multiple valid and reliable data sources	Based on assumptions or unreliable data
A framework that can be used to assist with special education decisions	Pre-referral process for special education

Handout 1.3: Activator Activity

Directions: Generate three to five practices you believe are the most important teaching practices all classroom teachers need to know, and write them in the first column. Leave the second column empty. We will revisit this activity at the end of the module.

What I believe are the most important practices teachers need to know to implement core instruction.	What research indicates are the most important practices teachers need to know to implement core instruction.
1.	
2.	
3.	
4.	
5.	

Handout 1.4: High-Leverage Practice (HLP) Expert Note-Taking Guide

Directions:

1. Get into groups of 4 to 5 participants.
2. Identify one of the HLPs from #7 through #22.
3. Provide individual team members 5–7 minutes to review their assigned practices and highlight key points.
4. Have individual team members briefly describe their assigned practices with the group (~1 minute per practice).
5. Discuss implementation considerations.

A link to the high-leverage practices can be found here: <https://highleveragepractices.org>

Key Points	Implementation Considerations

Handout 1.5: Tools for Identifying Evidence-Based Interventions

Several online tools are available to assist educators in identifying evidence-based strategies and published interventions. This handout describes three of these resources.

What Works Clearinghouse (WWC)

- **Topics:** Literacy, Mathematics, Science, Student Behavior, Youth with Disabilities, College and Career, Dropout, Early Childhood, Education Technology, English Language Learners
- **Resources:** Intervention Research Reports, Practice Guides, Videos of Effective Math Practices, Reviewed Research Studies
- **Search Features:** Search by topic and subcomponents, grade (preK to 16), effectiveness, delivery method (whole class, small group, 1:1), program type (curriculum, intervention, practice), race, gender
- **Results:** Improvement Index (expected change in percentile rank), effectiveness rating (e.g., positive, potentially positive, mixed), effect size (overall and by subcomponents found at end of Intervention Report)
- **Funding Source:** Institute of Education Sciences, U.S. Department of Education
- **Website:** <http://ies.ed.gov/ncee/wwc/>

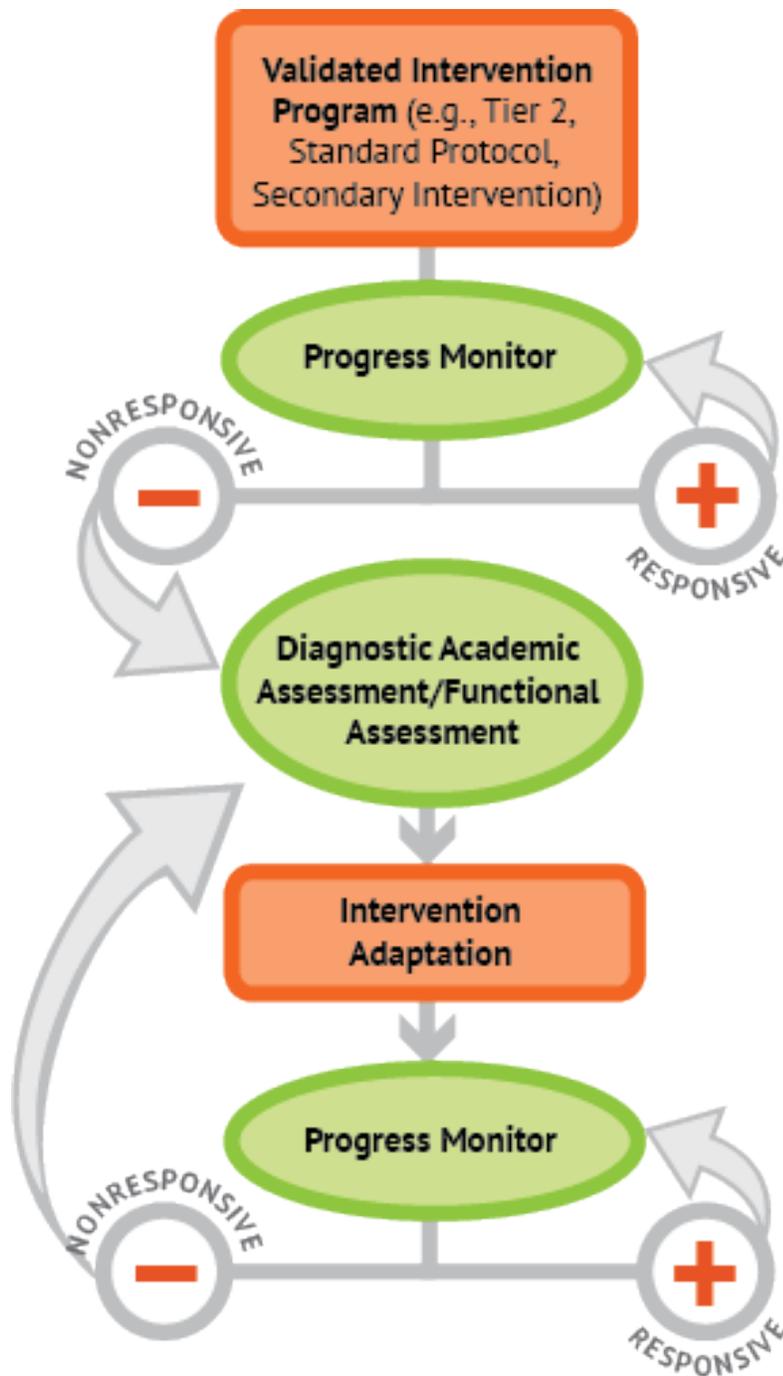
National Center for Intensive Interventions (NCII) Tools Charts

- **Topics:** Academic (Mathematics, Reading, Writing) and Behavior
- **Resources:** Behavior and Academic Interventions Tools Charts, Glossary of Terms, User Guide, Audio Tour, Progress Monitoring Tools Charts, Webinars, Sample Lessons and Activities, Newsletters
- **Search Features:** Search by elementary or middle/high school, subject/behavior, effect size, study, intervention title, study quality
- **Results:** Quality of research study (e.g., fidelity of implementation, participants, design), effect size (targeted and broad measures), intervention implementation information (group size, duration, delivery method)
- **Funding Source:** Office of Special Education Programs, U.S. Department of Education
- **Website:** www.intensiveintervention.org

Best Evidence Encyclopedia

- **Topics:** Mathematics, Reading, Science, School Reform, Early Childhood, Technology, English Language Learners
- **Resources:** Magazine, Articles, Program Reviews, Newsletters, Full Reports, Educator Summaries
- **Search Features:** Search by topic, elementary or middle/high school, top-rated programs,
- **Results:** Rating of Evidence of Effectiveness (strong, moderate, limited or insufficient evidence), type of program, description
- **Funding Source:** Johns Hopkins University School of Education's Center for Data-Driven Reform in Education (CDDRE) under funding from the Institute of Education Sciences, U.S. Department of Education.
- **Website:** www.bestevidence.org

Handout 1.6: Data-Based Individualization Process



Source: National Center on Intensive Intervention (NCII), <http://www.intensiveintervention.org/>

MTSS Presentation Glossary

Core curriculum. The core curriculum includes the materials and instructional standards required of all students in the general education setting. Core curricula often are instituted at the elementary and secondary levels by local school boards, departments of education, or other administrative agencies charged with overseeing education.

Data-based decision making. Data-based decision making is the ongoing process of analyzing and evaluating student data to inform educational decisions, including but not limited to approaches to instruction, intervention, allocation of resources, development of policy, movement within a multi-level system, and disability identification.

Evidence-based intervention. An evidence-based intervention is an intervention for which data from scientific, rigorous research studies have demonstrated (or empirically validated) the efficacy of the intervention. Applying findings from experimental studies, single-case studies, or strong quasi-experimental studies, an evidence-based intervention improves student learning beyond what is expected without that intervention.

Fidelity of implementation. Fidelity of implementation refers to the accurate and consistent delivery of instruction or assessment in the manner in which it was designed or prescribed according to research findings and/or developers' specifications. Five common aspects of fidelity are adherence, exposure, program differentiation, student responsiveness, and quality of delivery.

Individualized Education Program (IEP). An IEP is a legal document that describes the plan for delivering specially designed instruction, related services, and accommodations to meet the educational needs of a student with a disability.

Individuals with Disabilities Education Act (IDEA). IDEA was originally passed in 1975 as the Education for All Handicapped Children Act, with the latest reauthorization in 2004. It is the federal special education law that guarantees a free, appropriate, public education in the least restrictive environment for students with disabilities from birth through age 21. IDEA 2004 allows response to intervention to be used as a basis for decision making when determining whether a student is eligible for special education services as a student with a learning disability.

Multi-Tiered Systems of Support (MTSS). MTSS is a prevention framework that organizes building-level resources to address each individual student's academic and/or behavioral needs within intervention tiers that vary in intensity. MTSS allows for the early identification of learning and behavioral challenges and timely intervention for students who are at risk for poor learning outcomes. It also may be called a multi-level prevention system. The increasingly intense tiers (e.g., Tier 1, Tier 2, Tier 3), sometimes referred to as levels of prevention (i.e., primary, secondary, intensive prevention levels), represent a continuum of supports. Response to intervention (RTI) and positive behavioral interventions and supports (PBIS) are examples of MTSS.

Positive Behavioral Interventions and Supports (PBIS). PBIS is a tiered behavior support framework for enhancing the adoption and implementation of a continuum of evidence-based interventions to achieve behaviorally important outcomes for all students. PBIS provides a decision-making framework that guides the selection, integration, and implementation of preventive and instructive behavioral practices. For additional information, view the National Technical Assistance Center on Positive Behavioral Interventions and Supports website (<https://www.pbis.org/>).

Problem-solving approach. Within an MTSS or PBIS model, a problem-solving approach is used to tailor an intervention for an individual student. A problem-solving approach typically has four stages: problem identification, problem analysis, plan implementation, and plan evaluation.

Progress monitoring. Progress monitoring is used to assess a student’s performance, to quantify his or her rate of improvement or responsiveness to intervention, to adjust the student’s instructional program to make it more effective and suited to the student’s needs, and to evaluate the effectiveness of the intervention. For additional information, view the National Center on Intensive Intervention’s Academic Progress Monitoring and Behavioral Progress Monitoring Tools Charts (<http://www.intensiveintervention.org/resources/tools-charts>).

Screening. Screening is conducted to identify students who may be at risk for poor learning outcomes so that early intervention can occur. Screening assessments typically are brief and usually are administered with all students at a grade level. Some schools use a gated screening system, in which universal screening is followed by additional testing or short-term progress monitoring to confirm a student’s risk status before intervention occurs.

Tier 1. Tier 1 also may be referred to as the core curriculum or primary prevention level. The primary prevention level is the first level in a multi-level prevention system. It consists of high-quality core curriculum and research-based instructional practices that meet the needs of most students

Tier 2. Tier 2 also may be referred to as the targeted intervention or secondary prevention level. It is the second level of intensity in a multi-level prevention system. Interventions occurring at the secondary level are evidence based and address the learning or behavioral challenges of students identified as at risk for poor learning or behavioral outcomes.

Tier 3. Tier 3 may be referred to as intensive intervention or tertiary prevention level. This level is typically the most intense level of a multi-level prevention system. Tier 3 consists of individualized, intensive intervention(s) for students who have severe and persistent learning or behavioral needs. Data-based individualization is an approach that may be used within the tertiary prevention level.

Tiered Systems

Accommodations. Accommodations are changes to instruction or assessment administration that are designed to increase students' access to materials or enable them to demonstrate what they know by mitigating the impact of their disability. They also are designed to provide equity, not advantage, for children with disabilities.

Benchmark. A benchmark is a pre-determined level of performance on a screening or progress monitoring assessment that is considered representative of proficiency or mastery of a certain set of skills.

Core curriculum. The core curriculum includes the materials and instructional standards required of all students in the general education setting. Core curricula often are instituted at the elementary and secondary levels by local school boards, departments of education, or other administrative agencies charged with overseeing education

Differentiated instruction. Differentiated instruction refers to an educator's strategies for purposely adjusting curriculum, teaching environments, and instructional practices to align instruction with the goal of meeting the needs of individual students. Four elements of the curriculum may be differentiated: content, process, products, and learning environment.

Evidence-based intervention or practice. An evidence-based intervention is an intervention for which data from scientific, rigorous research studies have demonstrated (or empirically validated) the efficacy of the intervention. Applying findings from experimental studies, single-case studies, or strong quasi-experimental studies, an evidence-based intervention improves student learning beyond what would be expected without that intervention.

Fidelity of implementation. Fidelity of implementation refers to the accurate and consistent delivery of instruction or assessment in the manner in which it was designed or prescribed according to research findings and/or developers' specifications. Five common aspects of fidelity are adherence, exposure, program differentiation, student responsiveness, and quality of delivery.

High-leverage practices. High leverage practices are cross cutting practices that are used by all teachers in delivering classroom instruction and evidence-based interventions and practices. They are considered essential to effective teaching, limited in number, observable, and of sufficient grain size to preserve complexity of teaching.

Research-based curricula. Incorporate design features that have been researched generally; however, the curriculum or program as a whole has not been studied using a rigorous research design.

Primary prevention. Level primary prevention may also be referred to as the core curriculum or Tier I. The primary prevention level is the first level in a multi-level prevention system. It consists of high-quality core curriculum and research-based instructional practices that meet the needs of most students.

Multi-Tiered Systems of Support (MTSS) Implementation: Reflection and Action Planning Sheet

Instructions

This planning sheet provides schools with a space to reflect and identify goals and next steps that are appropriate for developing and/or strengthening a district or school-wide MTSS framework.

Work with your district team to review the MTSS components below. After reflecting on your district's implementation status for each of the questions, begin drafting some goals and next steps that are most relevant to your role.

MTSS Essential Components

MTSS Essential Components		
MTSS Essential Component	Guiding Questions	Status/Notes
MTSS Vision and Teams	What other initiatives are in your district? How can you align those initiatives within your MTSS framework?	
	Do you have a district implementation team to support MTSS implementation? Who are the members of that team? Is there someone with executive leadership authority on the team?	
	Does the district currently have an implementation plan for MTSS that uses fidelity data, student outcome data, capacity data, scale-up data, and includes goals that are measurable?	
	Is there a district communication plan about MTSS? Does the communication plan include internal and external stakeholders?	
	Does the district team plan for continuous improvement of staff skills through professional development and/or coaching?	
	What are the district decision rules (e.g., between tiers), cut points, and data-based decision-making framework process?	

Tier 1	Does your district meet frequently to identify students at-risk for poor learning outcomes?	
	What are the strengths and weaknesses of your district core curriculum programs?	
	Are your core curriculum standards aligned, evidence based, comprehensive, and meeting the needs of 80% of the students?	
Tier 2	How do you ensure that teachers are implementing interventions with fidelity?	
	What is the district's guidance around evidence-based programs and practices that should be used at Tier 2?	
	Is there guidance around how schools should set up their schedules to ensure they are truly supplemental to Tier 1?	
	How do teachers monitor responsiveness in Tier 2?	
	What funding or other resources, if any, are available to help schools implement Tier 2, standardized interventions?	
	What are the strengths and weaknesses of Tier 2 systems in your district?	

Tier 3	How do you ensure that teachers are implementing interventions with fidelity?	
	What are the strengths and weaknesses of Tier 3 systems in your district?	
	What is the district guidance around evidence-based programs and practices that should be used at Tier 3?	
	How do teachers monitor responsiveness in Tier 3?	
	Is there guidance around using Data-Based Individualization (DBI) to intensify instruction at Tier 3?	
	How are students with disabilities served across tiers?	

MTSS Essential Component	Choose 5 priorities from the above sections:	Goals/Action Steps	
		Action Steps	Person Responsible
MTSS Vision and Teams Tier 1 Tier 2 Tier 3	1.		
	2.		

	Choose priorities from the above sections:	Goals/Action Steps	
		Action Steps	Person Responsible
	3.		
4.			
5.			

Resources

Resource Documents

Essential Components of RTI—A Closer Look at Response to Intervention, National Center on Response to Intervention (NCRTI). This resource provides a definition of RTI, reviews essential RTI components, and responds to frequently asked questions. The information presented is intended to provide educators with guidance for RTI implementation that reflects research and evidence-based practices and supports the implementation of a comprehensive RTI framework.

http://www.rti4success.org/sites/default/files/rtiessentialcomponents_042710.pdf

Information Brief: Developing an RTI Guidance Document, NCRTI. This tool is based on the lessons learned from providing support to states developing guidance documents. Included are frequently asked questions about guidance documents and a template to help states, districts, and schools develop their own documents.

<http://www.rti4success.org/resource/developing-rti-guidance-document>

Implementation Research: A Synthesis of Literature, National Implementation Research Center (NIRN). This monograph summarizes findings from an extensive review of the research literature on the implementation of evidence-based practices.

<http://nirn.fpg.unc.edu/sites/nirn.fpg.unc.edu/files/resources/NIRN-MonographFull-01-2005.pdf>

Implementing RTI Using Title I, Title III, and CEIS Funds: Key Issues for Decision-Makers, U.S. Department of Education. This presentation answers questions specifically about funds provided under three federal programs: Title I of the Elementary and Secondary Education Act, Title III of the Elementary and Secondary Education Act, and funds for Coordinated Early Intervening Services (CEIS), available under the Individuals with Disabilities Education Act (IDEA).

<http://www.rti4success.org/resource/implementing-rti-using-title-i-title-iii-and-ceis-funds-key-issues-decision-makers>

Response to Intervention (RTI): Funding Questions and Answers, NCRTI. This document provides written responses from the U.S. Department of Education Office of Special Education Programs (OSEP) on the use of Individuals with Disabilities Education Act (IDEA) funds for the implementation of RTI and answers eight commonly asked questions on funding RTI. <http://www.rti4success.org/resource/response-intervention-rti-funding-questions-and-answers>

RTI Glossary of Term (PDF), NCRTI This glossary defines some of the most commonly used terms in an RTI framework. <http://www.rti4success.org/resources/rti-glossary-terms>

RTI Pilot Site Selection: Things to Consider, NCRTI. Pilot sites often play an important part in effective RTI implementation. This information brief guides teams through the steps of developing an RTI pilot site selection process. It provides team facilitators discussion questions that they can use to help teams examine their priorities, evaluation strategies, resources, and possible selection processes.

<http://www.rti4success.org/resource/rti-pilot-site-selection-things-consider>

RTI Placemat (PDF). This at-a-glance “RTI placemat” serves as a supplemental resource to the Essential Components document.

http://www.rti4success.org/sites/default/files/RTI_Placemat_2015.pdf

Videos

Ask the Expert: How can I get teachers and staff to buy in to the RTI process? (2:00 minutes). Dr. Evelyn Johnson, NCRTI, responds to this question (May 2010).

<http://www.rti4success.org/video/how-can-i-get-teachers-and-staff-buy-rti-process>

Ask the Expert: How does RTI differ from previous approaches to providing interventions? (5:46 minutes). Dr. Tessie Rose Bailey, NCRTI, responds to the question (October 2010). <http://www.rti4success.org/video/how-does-rti-differ-previous-approaches-providing-interventions>

Ask the Expert: How does RTI fit in with other policy initiatives? (3:16 minutes). Dr. Evelyn Johnson, NCRTI, responds to this question (September 2010).

<http://www.rti4success.org/video/how-does-rti-fit-other-policy-initiatives>

Ask the Expert: We hear a lot about fidelity of implementation when talking about RTI. What does this really mean? (05:17 minutes). Doug Fuchs, NCRTI, responds to this question (March 2010). <http://www.rti4success.org/video/we-hear-lot-about-fidelity-implementation-when-talking-about-rti-what-does-really-mean>

Ask the Expert: If an elementary school is already implementing RTI in academic subjects, what is the best way for them to begin to incorporate behavior interventions? (6:16 minutes). Joe Wehby, NCRTI, responds to this question (March 2012). <http://www.rti4success.org/video/if-elementary-school-already-implementing-rti-academic-subjects-what-best-way-them-begin>

Ask the Expert: What is RTI and what are the essential components that must be present for it to be implemented with fidelity? (5:46 minutes). Whitney Donaldson, NCRTI, responds to this question (October 2010).

<http://www.rti4success.org/video/what-rti-and-what-are-essential-components-must-be-present>

Essential Components: What is response to intervention (RTI)? (26:30 minutes). Dr. Tessie Rose Bailey, NCRTI, responds to this question. A recorded webinar, webinar transcript, PDF version, and Live Chat Q&A are available.

<http://www.rti4success.org/video/what-rti-essential-components>

Webinars

Planning and First Steps for RTI, NCRTI. In this webinar, Dr. Alexandra Hilt-Panahon and Deborah Gould Stover provides examples of what planning is required before successfully implementing RTI as well as the initial steps that should be taken when implementing RTI within schools. Examples illustrate how elementary schools have used RTI to address the needs of culturally and linguistically diverse student populations. In addition, the webinar shares how elementary schools have resolved challenges such as revising schedules and reallocating personnel to provide interventions. <http://www.rti4success.org/video/planning-and-first-steps-rti>

Planning and First Steps for RTI (57:34 minutes), NCRTI. This webinar provides examples of what planning is required before successfully implementing RTI as well as the initial steps that should be taken when implementing RTI within schools. Examples illustrate how elementary schools have used RTI to address the needs of culturally and linguistically diverse student populations. In addition, ideas are shared to show how elementary schools have resolved challenges such as revising schedules and reallocating personnel to provide interventions.

<http://www.rti4success.org/webinars/video/888%20>

RTI Implementation: Developing Effective Schedules at the Elementary Level, NCRTI. This 60-minute recording offers recommendations for efficient, effective, and sustainable schedules. It also addresses issues related to the development of effective schedules for the implementation of RTI at the elementary level, including the scheduling of core instruction, intervention time, team meetings, and planning.

<http://www.rti4success.org/video/rti-implementation-developing-effective-schedules-elementary-level>

We're "Doing RTI"—A Closer Look at Implementation (51:28 minutes), NCRTI. In this webinar, Dr. Rebecca Zumeta, NCRTI, and Mike Jacobsen, Director of Assessment in RTI, in Washington state's White River School District, discuss how NCRTI's implementation integrity rubric was used to conduct an interview process that helped the state's pilot sites evaluate their RTI implementation.

<http://www.rti4success.org/video/were-doing-rti-closer-look-implementation>

Tools

Active Implementation Tools, SISEP and NIRN. Active Implementation Lessons on tools are very short (5–15 minutes), and interactive Web presentations are designed to help you and your team get started and get better with Active Implementation. They focus on specific implementation tools and practices and can be viewed online for self-paced learning or used for professional development in a team setting.

<http://implementation.fpg.unc.edu/modules-and-lessons>

Essential Components of RTI Integrity Rubric and Worksheet, NCRTI. The RTI Essential Components Integrity Rubric and the RTI Essential Components Integrity Worksheet are for use by individuals responsible for monitoring the school-level fidelity of RTI implementation. The rubric and the worksheet are designed to be used together and are aligned with the essential components of RTI.

<http://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet>

Get Started: MTSS Implementation, RTI Action Network. This online resource focuses on the necessary steps for developing a building-level plan for successful implementation of multi-tiered systems of support (MTSS). It includes five sections: Building Support, Develop a Plan, Implement Your Plan, Evaluate and Refine, and Checklists and Forms. <http://www.rtinetwork.org/getstarted>

Implementing District Positive Behavioral and Interventions and Supports (PBIS), PBIS. The Web resource outlines the district-level infrastructure necessary to implement and sustain a tiered system of behavior support. Users can access tools, articles, videos, and training resources. <http://www.pbis.org/school/district-level>

MTSS Checklists and Forms, RTI Action Network. This site provides sample MTSS planning forms and checklists, such as *Self-Assessment of Problem Solving Implementation* (SAPSI), treatment integrity protocols, beliefs and perceptions of MTSS skills surveys, and intervention documentation forms.

<http://www.rtinetwork.org/getstarted/checklists-and-forms>

Scaling-Up Tools and Resources, SISEP. The SISEP Center produces a variety of tools and resources for implementation, scaling up, and system reinvention work as well as delivers online and off-line coaching, teaching, and learning.

<http://sisep.fpg.unc.edu/tools-and-resources/home>

Training Modules

Active Implementation (AI) Modules, State Implementation & Scaling-up of Evidence-based Practices (SISEP) and National Implementation Research Network (NIRN). AI Modules are short (30–45 minutes) online modules designed to be self-paced or blended with in pre-service and in-service training. They include content, activities, and assessments designed to promote the knowledge and practice of implementation science and scaling up.

<http://implementation.fpg.unc.edu/modules-and-lessons>

Developing an RTI Professional Development Plan: Things to Consider, NCRTI.

This module is designed to help participants plan effective and appropriate professional development (PD) based on research, data, and best practices. Through the module, participants will increase their understanding of the necessary considerations for developing a PD plan, increase awareness of available PD tools, and draft a PD plan.

<http://www.rti4success.org/resource/developing-rti-professional-development-plan-things-consider>

RTI Implementer Series Self-Paced Learning Modules, NCRTI. The RTI Implementer Series Self-Paced Learning Modules is a series of 11 learning modules for

implementers of RTI. The learning modules are intended to provide foundational knowledge about the essential components of RTI and to build an understanding about the importance of RTI implementation. Each module includes the learning module (live version and downloadable version), transcript, PowerPoint presentation, handouts, and the training manual (if available). <http://www.rti4success.org/resource/rti-implementer-series-self-paced-learning-modules>

Train-the-Trainer Materials: Response to Intervention Implementer Series, NCRTI.

These materials are intended for use by those wishing to conduct a training-of-trainers (TOT) for the RTI Implementer Series. TOT facilitators should have knowledge of the materials provided here, the Implementer Series training module materials (e.g., PowerPoints, training manuals, and handouts), Facilitator's Guide, and related readings found on the center's website. The three Implementer Series training modules are intended for beginning implementers of RTI and provide foundational knowledge about the essential components of RTI and to build an understanding about the importance of RTI implementation.

<http://www.rti4success.org/resource/train-trainer-materials-response-intervention-implementer-series>

General Web Resources

The National Center for Response to Intervention, NCRTI. The NCRTI website provides various user-friendly resources for elementary and secondary schools and districts implementing schoolwide tiered systems of support. Resources include training materials, video clips and webinars, tools charts, and access to numerous documents.

<http://rti4success.org>

National Center on Intensive Interventions (NCII). NCII's mission is to build district and school capacity to support implementation of data-based individualization in reading, mathematics, and behavior for students with severe and persistent learning and behavioral needs. <http://www.intensiveintervention.org/>

National Implementation Research Network (NIRN). The mission of NIRN is to contribute to the best practices and science of implementation, organization change, and system reinvention to improve outcomes across the spectrum of human services. The website provides resources and trainings materials to support implementation. <http://nirn.fpg.unc.edu/>

Positive Behavioral Interventions and Support (PBIS). PBIS is a national technical assistance center that emphasizes the impact of implementing PBIS on the social, emotional, and academic outcomes for students with disabilities. The website provides recorded videos and webinars, self-paced training materials, and implementation resources. <http://www.pbis.org/>

RTI Action Network. This website provides information for practitioners with information on what is RTI, professional development opportunities, implementation information, and opportunities to connect with others. <http://www.rtinetwork.org/>

State Implementation & Scaling-up of Evidence-based Practices (SISEP) Center. SISEP has been working with several states on scaling up RTI, transition programs, and PBIS statewide. This site has numerous resources, including assessments of implementation, planning resources, and evaluation resources. <https://sisep.fpg.unc.edu/>