

WYOMING MTSS INTRODUCTORY MODULE SERIES

MODULE 6: MTSS ESSENTIAL COMPONENT: EVIDENCE-BASED TIER II Participant Workbook

About This Workbook

This participant workbook is intended for use with the following additional resources:

- Module 6: MTSS Essential Component–Evidence-Based Tier II slide presentation
- Module 6: MTSS Essential Component–Evidence-Based Tier II Facilitator’s Guide

Activities found in this workbook can be adapted to reflect state and local context, needs, and priorities.

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Handout 6.1: Making Connections---Self-Evaluation of Tier II System

Directions: Read the descriptors in each column. With your team, determine which descriptor best describes your current Tier II system.

Criteria	1	3	5
a. Evidence-Based Intervention	Tier II-level interventions are not evidence based in content areas and grade levels where they are available.	Some Tier II- level interventions are evidence based in content areas and grade levels where they are available.	All Tier II-level interventions are evidence based in content areas and grade levels where they are available.
b. Complements Core Instruction	Tier II-level intervention is poorly aligned with core instruction and incorporates different topics, even though those topics are not foundational skills that support core program learning objectives.	Tier II-level intervention incorporates foundational skills, but these only occasionally align with the learning objectives of core instruction.	Tier II-level intervention is well aligned with core instruction and incorporates foundational skills that support the learning objectives of core instruction.
c. Instructional Characteristics	One or none of the following conditions is met: (1) interventions are standardized; (2) Tier II-level interventions are led by staff trained in the intervention according to developer requirements; and (3) group size and dosage are optimal (according to research) for the age and needs of students.	Two of the following conditions are met: (1) interventions are standardized; (2) Tier II-level interventions are led by staff trained in the intervention according to developer requirements; and (3) group size and dosage are optimal (according to research) for the age and needs of students.	All three of the following conditions are met: (1) interventions are standardized; (2) Tier II-level interventions are led by staff trained in the intervention according to developer requirements; and (3) group size and dosage are optimal (according to research) for the age and needs of students.
d. Addition to Tier I	Tier II-level interventions replace core instruction.	Tier II-level interventions sometimes supplement core instruction and sometimes replace core instruction.	Tier II-level interventions supplement core instruction.

Handout 6.2: 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, Math, 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 (pre-K 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 on 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 (Math, 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, Newsletter
- **Search Features:** Search by elementary or middle 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:** Math, Reading, Science, School Reform, Early Childhood, Technology, English Language Learners
- **Resources:** Magazine, Articles, Program Reviews, Newsletter, 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 6.3: Five Elements of Fidelity

Element	Considerations	What would this look like? Examples in action.	How will I know it is happening? Possible data sources.
Student Engagement	How engaged and involved are the students in this intervention or activity?		
Program Specificity	How well is the intervention defined and different from other interventions?		
Adherence	How well do we stick to the plan, curriculum, or assessment?		
Exposure/Duration	How often does a student receive an intervention? How long does an intervention last?		
Quality of Delivery	How well is the intervention, assessment, or instruction delivered? Do you deliver instruction using high leverage practices?		

Handout 6.4: What Works Clearinghouse Scavenger Hunt

Directions: With your team, complete the tasks outlined in this handout. Participants will need access to a computer and the internet. Teams will need to access the What Works Clearinghouse site to complete the tasks, <https://ies.ed.gov/ncee/WWC/>.

Task 1. Find What Works

For this activity, your team will identify interventions that have been shown to be effective for certain age groups and content areas. From the What Works Clearinghouse landing page, select the topic (e.g., literacy, mathematics, behavior) in the **Find What Works** section. Then, use the **Filter by Topic** feature to narrow the list to match the grade level, delivery method, program type, and outcomes of interest.

Help us find an intervention for...	Potential Intervention(s)
1. A 3 rd grade student who needs a small group intervention that focuses on reading fluency	
2. A middle school math student who is struggling in all areas of mathematics	
3. A secondary student who is struggling with reading comprehension and writing	
4. A 5 th grade student who is struggling with externalizing behavior	

Task 2. Evaluate the Impact of an Intervention

For this activity, your team will use the search feature to identify the evidence base for the intervention Read Naturally©*. In the search box, enter “Read Naturally.” A list of links will appear. Scroll down and click on the *WWC Summary of Evidence* page for Read Naturally©. After accessing the summary page for the intervention, answer the following questions.

What do we want to know?	What did the evidence suggest?
1. Review the tabs across the top. What four areas/ student populations were evidence reviewed for Read Naturally©?	
2. For beginning reading, what outcome domain was the intervention found to have potentially positive effects? What was the improvement index for this domain for beginning reading?	
3. Review the evidence for the intervention’s use for students with learning disabilities (click on the Students with Learning Disabilities tab). Which domain was Read Naturally© found to have potentially positive effects? What grade levels were included in the research?	
4. The description states that the primary purpose of Read Naturally© is to improve reading fluency for all students at all levels. Based on the evidence provided in the summary for all groups, are you convinced? Why or why not?	

**The Wyoming Department of Education does not endorse any interventions. Read Naturally © is used for illustrative purposes only.*

Task 3. Compare Interventions

For this activity, teams will use the compare feature to identify an intervention that most closely matches the needs of school. Based on a review of schoolwide data, the team determines that they need to investigate what *supplemental* intervention materials are available to increase general *reading achievement* for grades K-2.

Step 1. From the WWC home page, select the literacy icon. Use the ***Filter by Topic*** feature to find a supplemental literacy intervention shown to be effective in improving general reading achievement for grades K – 2.

Step 2. Use the compare feature on the right to compare the top four entries. First, click the boxes to the right of the intervention in the ***compare*** column for the first four entries. A compare selected box will appear above the checkmarks. Click on ***compare selected*** to generate a report. Use the report to answer the following questions.

What do we want to know?	What does the evidence suggest?
1. Have any of the interventions been examined for the grade range of interest (K -2)? If yes, which ones?	
2. How many of the selected interventions have demonstrate at least potentially positive effects for reading achievement? Which one was found to have the greatest level of positive impact?	
3. Given the information in the report, which intervention(s) should this team further investigate for use in Tier II system? What is your reasoning?	

Task 4. On Your Own

For this activity, teams will review the evidence for Tier II interventions currently used in their school.

Step 1. Identify 2-3 interventions that are currently used in your school in either reading or math. Write the names of the interventions at the tops of columns two through four.

Step 2. Identify the features of the interventions that are important for your school's needs (e.g., level of impact, age range, reading/math skills, type of delivery). Write 3-4 features in the first column.

Step 3. Use the resources available through the What Works Clearinghouse website to determine the extent to which the evidence supports the selected intervention for your school's needs.

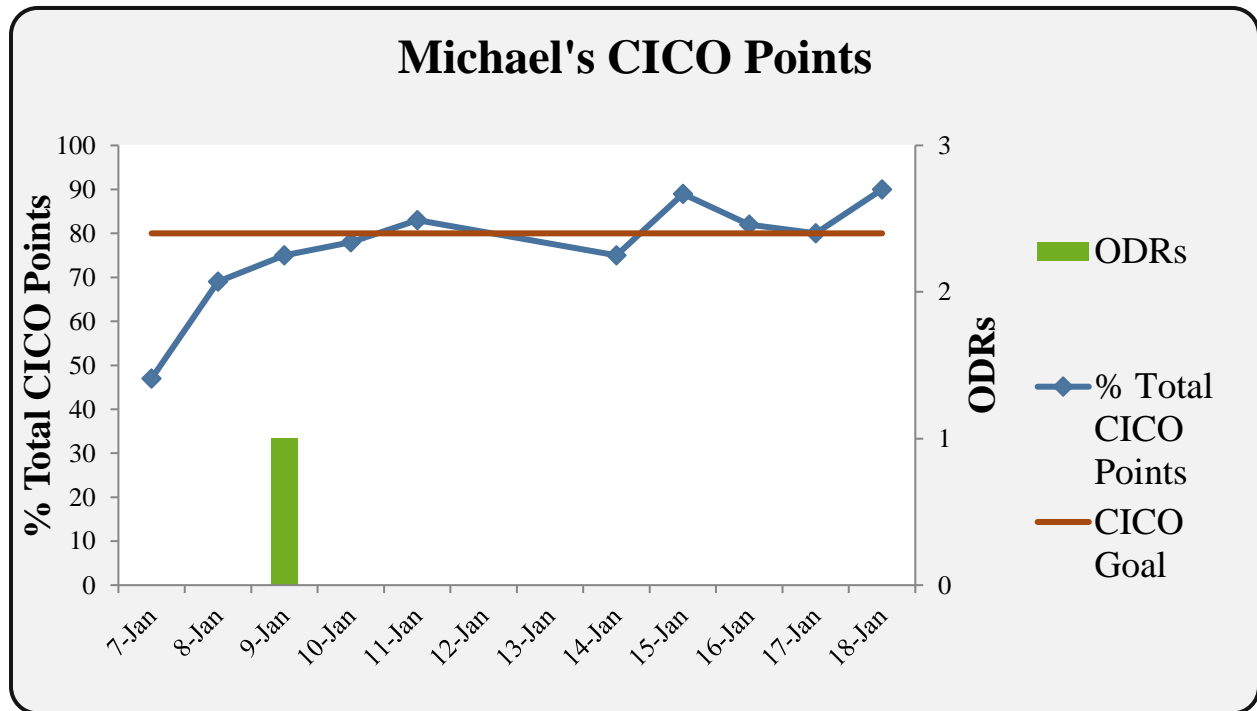
Important Tier II Intervention Features	Intervention 1:	Intervention 2:	Intervention 3:

Note: A video tutorial for using the Find What Works features on the WWC website is available at this link:

<https://ies.ed.gov/ncee/wwc/Multimedia/27>

Handout 6.5: Evaluating Response to Tier II Interventions – Behavior

Directions: Examine the student progress monitoring data presented and answer the questions about the student Tier II intervention progress.



Tier II Intervention: Check-in/Check-out

- Dedicated staff person conducted a “check in” with the student to get ready for the day
- Teachers provided feedback on the student’s goals throughout the day
- Dedicated staff person conducted a “check out” with the student to reflect on the day
- Student accumulated points that could be traded at predetermined times for activities, prizes, or free time

Tier II Progress Monitoring Plan

- Staff collected and graphed points from Check-in/Check-out Card daily
- Reviewed student progress weekly

STEP 4—Evaluate the Plan: Michael

Review date(s).

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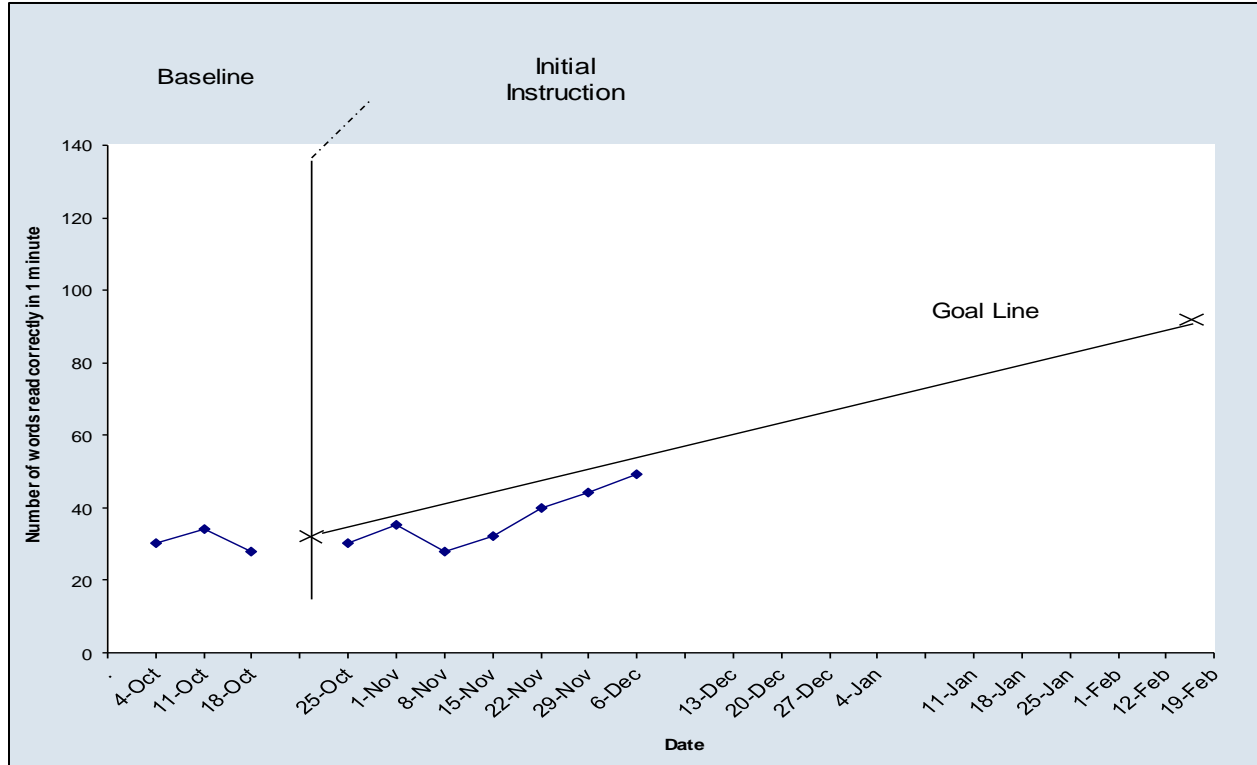
Evaluate impact of action plan.

Circle one and complete related section below: Positive Questionable Poor

Positive	
<p><i>Next steps (circle):</i></p> <ol style="list-style-type: none"> 1. Continue with strategy or intervention. 2. Increase goal. 3. Fade strategy or intervention. 4. Other: Please describe. 	<p><i>Comments/Actions/Evidence</i></p>
Questionable	
<p><i>Next steps (circle):</i></p> <ol style="list-style-type: none"> 1. Evaluate fidelity of implementation. 2. Continue strategy or intervention. 3. Refine strategy or intervention. 4. Other: Please describe. 	<p><i>Comments/Actions/Evidence</i></p>
Poor	
<p><i>Next steps (circle):</i></p> <ol style="list-style-type: none"> 1. Evaluate fidelity of implementation. 2. Evaluate alignment of strategy or intervention with hypotheses. 3. Consider other hypotheses (return to Step 2). 4. Evaluate validity of data. 5. Consider revising problem statement (return to Step 1). 6. Other: Please describe. 	<p><i>Comments/Actions/Evidence</i></p>

Handout 6.6: Evaluating Response to Tier II Interventions – Academic

Directions: Examine the student progress monitoring data presented and determine the student’s response to the Tier II intervention.



Tier II Intervention Dimensions

- Group size: six students
- Session length: 30 minutes per session
- Frequency: three sessions per week
- Program duration: seven weeks
- Instructional content and delivery: explicit instruction covering all components laid out in the instruction manual

Tier II Progress Monitoring Plan

- Passage Reading Fluency (PRF)
- Collected and graphed weekly

STEP 4—Evaluate the Plan: Jane

Review date(s).

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Circle one and complete related section below: Positive Questionable Poor

Positive	
<p><i>Next steps (circle):</i></p> <ol style="list-style-type: none"> 1. Continue with strategy or intervention. 2. Increase goal. 3. Fade strategy or intervention. 4. Other: Please describe. 	<p><i>Comments/Actions/Evidence</i></p>
Questionable	
<p><i>Next steps (circle):</i></p> <ol style="list-style-type: none"> 1. Evaluate fidelity of implementation. 2. Continue strategy or intervention. 3. Refine strategy or intervention. 4. Other: Please describe. 	<p><i>Comments/Actions/Evidence</i></p>
Poor	
<p><i>Next steps (circle):</i></p> <ol style="list-style-type: none"> 1. Evaluate fidelity of implementation. 2. Evaluate alignment of strategy or intervention with hypotheses. 3. Consider other hypotheses (return to Step 2). 4. Evaluate validity of data. 5. Consider revising problem statement (return to Step 1). 6. Other: Please describe. 	<p><i>Comments/Actions/Evidence</i></p>

Module 6 Quiz

Multiple Choice: Select the best answer.

1. What are the critical features of Tier II interventions? *Select all that apply.*
 - a. Scheduled in addition to Tier I
 - b. Uses evidence-based interventions that support academic and behavior needs
 - c. Scheduled at the same time of day for every grade
 - d. Uses standardized interventions with appropriate dosage and grouping size delivered by trained personnel with fidelity of implementation
 - e. Complements core academic and behavior instruction/programs
2. Which of the following best describes Tier II interventions?
 - a. Comprehensive research-based curriculum
 - b. Standardized, targeted small-group instruction
 - c. Individualized, based on student data
3. What is the recommended group size for Tier II interventions?
 - a. One-on-one
 - b. 8 – 15 students
 - c. 3 – 7, in accordance to publisher recommendations
 - d. Whole class

True/False: Identify whether the statement is true (T) or false (F).

4. _____ Tier II interventions should be monitored at least monthly using valid and reliable assessment tools.
5. _____ Fidelity of implementation refers to the degree to which teachers and other program providers implement programs as intended.

Module 6 Glossary

Aim line. The aim line, which is sometimes referred to as the *goal line*, represents the target rate of student progress over time. The aim line is constructed by connecting the data point representing the student's initial performance level and the data point corresponding to the student's year-end goal.

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.

Data Point. A data point is one score on a graph or chart. The data point represents a student's performance at one point in time.

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.

Goal Line. The goal line, also known as the *aim line*, represents the expected rate of student progress over time. A goal line is constructed by connecting the data point representing the student's initial performance level and the data point corresponding to the student's year-end goal.

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.