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APPENDIXES
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What Tools Have States Developed or Adapted to Assess Schools' Implementation of a Multi-Tiered System of Supports/Response to Intervention Framework?

See https://go.usa.gov/xdHvJ for the full report.

Appendix A. About the study

This appendix describes the impetus and rationale for the study of how states are assessing schools' implementation of multi-tiered system of supports (MTSS)/response to intervention (RTI) frameworks and reviews selected literature on key MTSS/RTI practices. Driven by the 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA, 2004), MTSS/RTI is a framework implemented in states to identify and support students with learning disabilities.

Why this study?

According to the Tennessee Department of Education, too many Tennessee elementary-school-age students read below grade-level standards. Only 43 percent of grade 3 students scored proficient in reading on the 2015 Tennessee state assessment. Furthermore, grade 3 students from historically underserved groups were less likely to be proficient in reading: 32 percent of economically disadvantaged students; 30 percent of Black, Hispanic, or American Indian/Alaskan Native students; 22 percent of English learner students; and 20 percent of students with disabilities (Tennessee Department of Education, 2016). These results are unsatisfactory to state policymakers and concerning because students with limited reading ability are at risk for grade retention and dropout. Students who struggle with reading in early elementary school are four times more likely than other students to leave school before graduation (Cannon & Lipscomb, 2011; Hernandez, 2011).

Tennessee's goal is to have at least 75 percent of grade 3 students reading proficiently by 2025 (Tennessee Department of Education, 2016). State leadership is addressing this challenge by establishing initiatives, such as the Response to Instruction and Intervention (RTI^2) framework, that underscore the importance of intervening early to prevent reading problems from escalating. The RTI^2 framework seeks to provide high-quality, rigorous, and differentiated instruction for all students through tier 1 supports and uses universal screening and data-based decisionmaking processes and tools to identify when students may need more targeted intervention and supports through tiers 2 and 3 (Tennessee Department of Education, 2017a). This framework enables educators to

intervene early for students with persistent academic difficulties and to identify students who may have a specific learning disability (Tennessee Department of Education, 2017a).

State leaders recognized that they could improve RTI^2 implementation, and in January 2017 the Tennessee Department of Education (TDOE) published *Response to Instruction and Intervention Framework,* a manual that provided updated guidance to districts and schools on how to implement RTI practices (Tennessee Department of Education, 2017b). In needs-sensing conversations, state leaders also acknowledged the challenges created by a lack of high-quality, accurate data for making decisions about how to support all Tennessee schools in implementing RTI^2 (N. Schwartz, personal communication, February 27, 2017). State leaders wanted to know how schools are implementing RTI^2 practices in order to understand whether the practices were improving literacy outcomes. To inform its examination of how Tennessee schools are implementing RTI^2, TDOE leaders were interested in learning how other states support schools by using tools to assess implementation fidelity and progress.

Although the Regional Educational Laboratory (REL) Appalachia's research partnership with TDOE focuses primarily on understanding how RTI can improve early literacy outcomes, TDOE leaders also expressed a broader interest in learning about tools that cover other content areas (such as math or behavior) and grade levels (middle and high school) as a result of recent RTI policy and practice shifts (Z. Stone, personal communication, July 12, 2017). As reflected in the most recent reauthorization of the Elementary and Secondary Education Act, under the Every Student Succeeds Act (2015), states including Tennessee are moving away from using an RTI framework for academics and a different framework for behavior and instead are using an integrated system of supports referred to as a multi-tiered system of supports (MTSS; Tennessee Department of Education, 2018; Zumeta Edmonds, 2016).

RTI is more closely associated with special education and data-driven decisionmaking to identify students with learning disabilities, whereas MTSS has a greater focus on general education and integrates both academics and behavior (Burns, Jimerson, VanDerHeyden, & Deno, 2016). Both RTI and MTSS, however, use a data-based framework, include processes and measures for screening all students, provide instruction to all (often called tier 1) and tiered intervention supports to struggling students (often called tiers 2 and 3), use evidence-based practices, and monitor students' progress (Burns et al., 2016). The terms RTI and MTSS are sometimes used interchangeably (National Center on Response to Intervention, 2015, n.d.). To conduct a comprehensive review of assessment tools in use, the REL Appalachia identified tools assessing RTI implementation that address RTI and MTSS,[1] all grade levels (elementary, middle, and high school), and multiple content areas (for example, literacy and math).

This study is intended to serve state leaders who are interested in developing or adapting a tool to assess MTSS/RTI implementation. Therefore, the study does not include tools that states adopted without modification from other organizations or states. By showing how other states are assessing implementation of MTSS/RTI practices, this descriptive study will help TDOE, as well as regional educational laboratories and other states, develop a strategy to learn more about how MTSS/RTI is being implemented in schools. Findings from the study may assist states without an MTSS/RTI implementation assessment tool to adopt, modify, or develop one that best meets their needs. In addition, states with an implementation assessment tool may use the study findings to review and reflect on the tool in order to affirm or refine it. The study findings also provide examples of approaches that state personnel used to roll out the tools and train school personnel in using tools and interpreting findings.

[1] To promote readability and alignment with TDOE's current language on RTI and to respond to guidance from REL Appalachia's study advisory panel of RTI experts, this report uses the terms *MTSS/RTI*. An exception is when describing the website and document review, when the report uses the term that accurately represents the framework that a particular state uses.

Examining the fidelity of implementation of the core components of an MTSS/RTI framework is the first critical step to understanding whether MTSS/RTI leads to better student outcomes. The development and use of better tools for assessing implementation fidelity may provide a catalyst for states to evaluate and assess the impact of MTSS/RTI.

Summary of multi-tiered system of supports/response to intervention key practices

Below is a summary of the research on key MTSS/RTI practices as they pertain to reading and math, with selected references. It is beyond the scope of this study to conduct a systematic literature review for each practice. Because the current study focused on MTSS/RTI implementation assessment tools specific to academics, particularly reading and math, this summary excludes literature on practices pertaining only to behavior within an MTSS framework.

Administer assessments

Screen all students, and target intervention support. Early identification of students at risk for long-term difficulties in reading and math begins with systematic screening using validated measures and processes. Screening takes place near the beginning of the school year and at least once in the middle of the year for all students in elementary school (Gersten et al., 2008; Gersten et al., 2009).[2] Screening data can identify students in need of intervention support and can be aggregated to examine the adequacy of the core curriculum and the effectiveness of different instructional strategies used in a school.

Monitor struggling students' responsiveness to intervention. A signature feature of MTSS/RTI is frequent assessment of student performance on a valid and reliable progress monitoring measure (for example, oral reading fluency in the early grades, Deno, 2016; Jenkins, Hudson, & Johnson, 2007; number identification in early math, Foegen, Jiban, & Deno, 2007). Examined over time, these measures depict students' growth and signal whether their response to intervention is on track to reach a learning goal within a specified period of time (Foegen & Deno, 2001; Fuchs, Deno, & Mirkin, 1984; Fuchs, Fuchs, Hamlett, & Stecker, 1991). Such progress monitoring, in addition to periodic universal screening, is seen as a way to reduce the number of students falsely identified as needing additional support (Compton et al., 2010) or to increase the likelihood that students referred for special education evaluations qualify for services (VanDerHeyden, Witt, & Gilbertson, 2007).

For reading, the recommended practice in elementary school is to monitor the progress of students in tier 2 at least monthly and of students in tier 3 at least weekly to determine their response to intervention (Gersten et al., 2008).[3] For math the recommended practice is to monitor the progress of students in tier 2 and tier 3 using outcome measures at least monthly and curriculum-based measures daily to biweekly to determine their response to intervention (Gersten et al., 2009).

To meet the standards for educational and psychological testing, screening and progress monitoring measures must provide evidence of validity and reliability (American Educational Research Association, 2014).

Offer multiple tiers of instruction and intervention

High-quality classroom-based instruction, often called tier 1. In tier 1, all students are provided high-quality core instruction using evidence-based programs (Denton, Vaughn, & Fletcher, 2003; Stoiber & Gettinger, 2016) and aligned with state standards (Jimerson, Stein, Haddock, & Shahroozi, 2016). Evidence-based programs are defined as practices that integrate the best available research with clinical expertise in the context of student

[2] Gersten et al. (2008) classified the level of evidence for this practice as moderate, because the evidence was supported by a series of high-quality correlational studies with replicated findings (Compton, Fuchs, Fuchs, & Bryant, 2006; Fuchs, Fuchs, & Compton, 2004; McCardle, Scarborough, & Catts, 2001; O'Connor & Jenkins, 1999; Scarborough, 1998).

[3] Gersten et al. (2008) classified the level of evidence for this practice as low for tier 2 students on the basis of consensus of the panel.

characteristics, culture, and preferences (Stoiber & Gettinger, 2016). All students receive reading and math core instruction during a designated block of time, which includes whole-class and small-group instruction. Small-group instruction enables the teacher to differentiate instruction based on assessments of students' current level and skills (Gersten et al., 2008; Gersten et al., 2009).[4] In tier 1, students are assembled for differentiated small-group instruction with a focus on one or more skills relevant to the core components of reading and math (Gersten et al., 2008; Gersten et al., 2009). According to the National Reading Panel (2000), research does not provide a clear, comprehensive model of how to teach reading to students in elementary school, but the panel did identify five essential components of reading instruction: phonemic awareness, word attack, fluency, vocabulary, and comprehension. For math, areas of emphasis within each grade from prekindergarten through grade 8 are outlined in the National Council of Teachers of Mathematics' Curriculum Focal Points (2006) guidance document.

Increasingly intensive tiers of intervention are often called tiers 2 and 3. Students who are identified by a screening assessment as performing below grade level receive an intervention. Instructional practices to increase instructional intensity include varying the amount of instructional time, group size, frequency of progress monitoring for determining student progress as a result of the intervention, and the teacher's role in providing the instruction (Balu et al., 2015; Elbaum, Vaughn, Hughes, & Moody, 2000; Mellard, McKnight, & Jordan, 2010; Sugai & Horner, 2009; Wanzek & Vaughn, 2007).

In the case of literacy, tier 2 interventions include providing "intensive, systematic instruction on up to three foundational reading skills in small groups to students who score below the benchmark on universal screening. Typically, these groups meet between three and five times a week, for 20 to 40 minutes" (Gersten et al., 2008, p. 19).[5] For math, tier 2 interventions are "aimed at building targeted mathematics proficiencies" and are "typically provided for 20 to 40 minutes, four to five times each week" (Gersten et al., 2009, p. 5).

The multiple tiers of instruction approach also supports interventions for students identified as performing "far below" grade level on reading and math. There is some evidence that providing students with two tiers of math instruction (through validated classroom instruction supplemented with high-quality tutoring) compared with just one tier of math instruction has positive student learning outcomes (Fuchs et al., 2008). Research evidence and expert judgment recommend providing "intensive instruction on a daily basis that promotes the development of the various components of reading proficiency to students who show minimal progress after reasonable time in tier 2 small group instruction (tier 3)" (Gersten et al., 2008, p. 26). Some experts, however, differ on whether these students should first receive tier 2 instruction or go directly to tier 3 (Vaughn & Swanson, 2015). In practice, tier placement may not correspond precisely with reading level as measured by screening tests (Balu et al., 2015; Wanzek & Vaughn, 2007). Students may cycle in and out of intervention tiers.

Support data-based decisionmaking

Screen all students, target intervention support, and monitor struggling students' responsiveness to interventions. Using data in decisionmaking is a prominent practice in an MTSS/RTI system. Schools implementing multiple tiers of reading and math instruction and intervention use assessments to screen all students and target intervention support to those identified as below grade-level benchmarks, monitor struggling students' responsiveness to interventions, and in some cases inform decisions about eligibility for special education services (Burns & Ysseldyke, 2005; Fletcher, Coulter, Reschly, & Vaughn, 2004; Fuchs & Fuchs, 2006; Gersten et al., 2008; Gersten et al., 2009; VanDerHeyden, Witt, & Barnett, 2005).

[4] Gersten et al. (2008) classified the level of evidence for this practice as low, because the evidence was supported by a correlational study that examined student reading growth when teachers employed a specific differentiation program (Connor et al., 2009).

[5] Gersten et al. (2008) classified the level of evidence for this practice as strong, because the evidence is based on 11 studies meeting What Works Clearinghouse standards or meeting standards with reservations.

Schools can choose from a range of commercial and free measures for monitoring progress. Elements of an assessment system include standardization of screening procedures; grade-level benchmarks or expectations; designated risk levels; ease and efficiency of administration; and documented reliability, validity, and diagnostic accuracy of the screening measures.

School-based data teams, including data experts, teachers, and school leaders, should develop a formal procedure for making informed decisions using data collected from assessment and progress monitoring measures (Schildkamp, Poortman, & Handelzalts, 2016). Professional development opportunities specifically targeting effective data use can have positive effects on student academic achievement and should be provided for teachers and school leaders (Lai & McNaughton, 2016).

Inform decisions regarding eligibility for special education services. Also, as part of an RTI framework for academic instruction, school staff are encouraged to intensify intervention or consider eligibility for special education services (for example, under the category of specific learning disability) when progress measures indicate insufficient response to interventions (Fletcher et al., 2004).

Support infrastructure practices for MTSS/RTI implementation

To implement an RTI system, schools usually form school-level teams, also called problem-solving teams, and allocate time for them to meet and evaluate the progress of students moving toward grade-level standards by using screening and progress monitoring data (Burns, Deno, & Jimerson, 2007; Schulte, 2016). Problem-solving teams are expected to follow an established process for using data to make decisions. General stages in the process include identifying the problem, defining the problem, exploring alternative solutions to the problem, applying a solution, and looking at the effects (Individuals with Disabilities Education Improvement Act, 2004). Schools should also designate support staff to guide teacher implementation of the program (Borman, Hewes, Overman, & Brown, 2003; Glennan, Bodilly, Galegher, & Kerr, 2004). In an RTI framework, support staff, such as instructional coaches, focus on working with teachers to understand their data or focus on improving reading and math instruction and making changes in intervention practices based on the data.

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Appendix B. Methods

This appendix includes a description of the sample selection for the in-depth tool analysis, the names of states and tools included or not included in the in-depth analysis, the interview selection criteria, the website and document review protocol, and the methods for coding and analyzing key multi-tiered system of supports (MTSS)/response to intervention (RTI) practices.

Sample selection for in-depth analysis

The study team used the process described below to arrive at a sample of 21 states (with 31 tools) for the in-depth tool analysis:

- **Step 1:** Conduct a website and document search for all 50 states and the District of Columbia to find tools used to support MTSS/RTI implementation.
- **Step 2:** Record information about MTSS/RTI systems–level tools that states verified they were using as of May 11, 2018, and record whether the tool was in development or under revision at that time. This step included tools that were developed by the state or adapted from existing tools as well as tools from other states or organizations that were used without being modified.
- **Step 3:** Use the inclusion and exclusion criteria in box B1 to select for more in-depth analysis, arriving at 21 states (with 31 tools).

Box B1. Inclusion and exclusion criteria for in-depth analysis of implementation assessment tools

Inclusion criteria

- Tool is publicly available on a state's website or accessible to the public on request.
- Tool focuses on a systems-level assessment of multi-tiered system of supports (MTSS) or response to interventions (RTI). This refers to the comprehensiveness of the tool, in that it includes practices that cover all aspects of the system, as opposed to focusing on one specific component of the MTSS/RTI framework.
- Tool was developed by the state or adapted from existing instruments, so they are tailored to the state's need.

Exclusion criteria

- Tool is from another state (such as Florida's Self-Assessment of MTSS and Michigan's Integrated Behavior and Learning Support Initiative's Reading Tiered Fidelity Inventory) and has not been modified or adapted by the state.
- Tool is from another organization (for example, the National Center on Response to Intervention, the National Center on Intensive Intervention, or the National Implementation Research Network) and has not been modified or adapted by the state.
- Tool focuses on a specific component of a state's MTSS/RTI framework (for example, progress monitoring) rather than taking a systems-level perspective of the MTSS/RTI framework.
- Document describes a state's MTSS/RTI framework but is not a tool used to provide ratings or scores (for example, Kansas's Innovation Configuration Matrix or Oregon's Response to Instruction and Intervention Installation Matrix).
- Tool focuses exclusively on behavior.
- Tool is not publicly available or accessible (for example, requires a special logon to access).
- Tool is in development or under revision.
- Tool is not specific to MTSS/RTI but can be applied to other innovations or initiatives more broadly (for example, District Capacity Assessment from the National Implementation Research Network and California's Differentiated Assistance Protocols for Local Educational Agencies).
- Tool is an abbreviated or abridged version of a tool that is already included in the in-depth analysis.
- State verified not having a tool.

Source: Authors' decisions about tool inclusion criteria established at the beginning of the study in 2018.

Of the 50 states and the District of Columbia, 5 states (10 percent) were excluded because state personnel chose not to participate (2 states) or did not verify the data collected for the study (3 states; table B1). For example, one state required submission of a formal application to conduct research before verifying data collected for the state; the study timeframe precluded submitting a formal application. One state chose not to participate in the study because of concerns about potential misrepresentation of the state's MTSS/RTI resources. The study team wanted state personnel to verify all data collected about the tool to ensure the accuracy of the information. Therefore, when a state official did not verify the data, that state was excluded from the overall study sample.

Twenty-five states (49 percent) were included in the overall study sample but were not included in the in-depth tool analysis because the state reported not having a tool to support MTSS/RTI implementation (12 percent), a tool was in development (7 percent), a tool was under revision (6 percent), or other exclusion criteria applied (24 percent; for example, state was using a tool from another state or organization without modification, state was using a general tool that encompassed more than MTSS/RTI, or a state-developed tool was not publicly available; see table B1). Because this study is intended as a resource for state leaders who are interested in developing or adapting a tool to assess MTSS/RTI implementation, it does not include tools that states adopted without modification from other organizations or states. Ten states (20 percent) used tools from other organizations or states without modification.

The remaining 21 states (41 percent) had a tool that the state developed or adapted to support MTSS/RTI implementation and were included in the in-depth tool analysis. Of these 21 states, 14 (66 percent) had one tool that met the inclusion criteria, 5 (24 percent) had two tools that met the inclusion criteria, 1 (5 percent) had three tools that met the inclusion criteria, and 1 (5 percent) had four tools that met the inclusion criteria (table B2). Two states had distinct tools to focus on reading and math separately, two states used more than one tool to target elementary and secondary grade levels separately, two states used multiple tools to assess the perspectives of both administrators and staff, and one state used multiple tools to assess implementation at both the district and school levels.

Table B1. Overall study sample

Status of state multi-tiered system of supports/response to intervention tools	Number of states (*N* = 51)	Percentage of states
States excluded from overall study sample		
State personnel chose not to participate in the study	2	4
No state personnel were designated to answer verification questions about the tool	1	2
State did not verify the lack of an implementation tool	1	2
State did not verify the implementation assessment tools the study team identified	1	2
Subtotal	**5**	**10**
States included in overall study, but not in in-depth tool analysis[a]		
State is using only tools from other states or organizations without modification	6	12
State is using a tool from another state or organization without modification and a general tool[a]	3	6
State is using a tool from another state or organization without modification and has another tool under revision[a]	1	2
State is using only a general tool[a]	1	2
State-developed tool is not publicly available[a]	1	2
Tool is in development	4	7
Tool is under revision	3	6
State verified not having a tool	6	12
Subtotal	**25**	**49**
States included in overall study and in in-depth tool analysis		
State is using only a tool that it developed or adapted and that is publicly available or accessible to the public.	16	31
State is using a tool that it developed or adapted from an existing tool and that is publicly available or accessible to the public, and state is using a tool from another state or organization without modification[b]	5	10
Subtotal	**21**	**41**

a. The key findings of the main report simplify the reporting categories for states that are included in the overall study but not in the in-depth analysis. The three states that are categorized as "State is using a tool from another state or organization without modification and a general tool" are counted only as using an existing tool without modification. The one state categorized as "State is using a tool from another state or organization without modification and has another tool under revision" is counted only as using an existing tool without modification. The remaining two states are described in a footnote: one state is using only a general tool that is not specific to multi-tiered system of supports/response to intervention, and one state-developed tool is not publicly available.

b. See table B3 for the names of the tools from other organizations or states that are being used without modification.

Source: Authors' analysis of tools based on study inclusion criteria in 2018.

Table B2. Study sample for in-depth analysis of multi-tiered system of supports/response to intervention implementation assessment tools

Number of tools meeting study inclusion criteria	Number of states (*n* = 21)	Percentage of states
State has one tool that met study inclusion criteria	14	66
State has two tools that met study inclusion criteria	5	24
State has three tools that met study inclusion criteria	1	5
State has four tools that met study inclusion criteria	1	5

Source: Authors' in-depth analysis of tools from the website and document review in 2018.

Names of states and tools included in the in-depth analysis

Table B3 lists the implementation assessment tools included in the in-depth analysis, organized by state. The table also includes the publication year and hyperlink for each tool.

Table B3. State and tool names for in-depth analysis of multi-tiered system of supports/response to intervention implementation assessment tools, with publication year and hyperlink

State	Assessment tool name	Publication year	Availability or hyperlink
Alabama	Implementation of Response to Instruction (RtI) in Alabama Self-Assessment Tool	2009	The tool is available to the public on request.
Alaska	District and School RTI Readiness Checklist	2009	https://education.alaska.gov/esea/rti/docs/alaska_rti_guidance.pdf (see appendix H)
Colorado	CO-MTSS Building Leadership Team (BLT) Self-Assessment	2017	https://www.cde.state.co.us/mtss/mtss-schoolself-assessmentevaluationtool
	MTSS Leadership Team (MLT) Self-Assessment	2017	https://www.cde.state.co.us/mtss/mtss-mlt-self-assessment-jan2017
Connecticut	Scientific Research-Based Interventions (SRBI) Self-Assessment	2012	http://spdg.serc.co/assets/program-evaluation/SRBI-Self-Assessment-for-2012-15-Cohort.docx
Florida	Self-Assessment of MTSS Implementation (SAM Version 2.0)	2015	http://www.floridarti.usf.edu/resources/program_evaluation/sam/sam.pdf
Idaho	Idaho RTI Fidelity Implementation Rubric	2012	https://idahotc.com/Resources/View/ID/274
Illinois	Self-Assessment of MTSS Implementation–Illinois (SAM-I)	2017	http://www.rti-innovations.com/uploads/1/0/8/2/10825600/e._sam-i__version_2.0__-_1.10.pdf
Kansas	Checklist for Implementation Readiness and the Kansas Multi-tier System of Supports Innovation Configuration Matrix (ICM)	2017	The tool is available to the public on request.
	Process Implementation Tool and the Kansas Multi-tier System of Supports Innovation Configuration Matrix (ICM)	2017	The tool is available to the public on request.
	Integrated MTSS Implementation Scale – Instructional Staff	2017	The tool is available to the public on request.
	Integrated MTSS Implementation Scale – Administrators	2017	The tool is available to the public on request.
Kentucky	Self-Reflection Tool for Sites with Exemplary RTI Practices	2018	https://education.ky.gov/educational/int/ksi/Documents/Self-Reflection_Tool_RTI_Model_Site.doc
Michigan	Reading Tiered Fidelity Inventory (R -TFI) Elementary-Level Edition	2018	https://miblsi.org/sites/default/files/Documents/Evaluation/Fidelity/RTFI/website_March2018_R-TFI%20Elementary-Level%20Edition_v1.3.pdf
	Reading Tiered Fidelity Inventory (R -TFI) Secondary-Level Edition	2018	https://miblsi.org/sites/default/files/Documents/Evaluation/Fidelity/RTFI/Jan_2018_R-TFI_Secondary-Level%20_Edition_v1.3_SECURED.pdf
	Reading Tiered Fidelity Inventory Reading Screening Items for Secondary Schools	2017	https://miblsi.org/sites/default/files/Documents/Evaluation/Fidelity/RTFI/July%202017-R-TFI%20Reading%20Screening%20Items%20for%20Secondary%20Schools_v1.1.pdf
Minnesota	Minnesota Reading Tiered Fidelity Inventory	2016	The tool is available to the public on request.

State	Assessment tool name	Publication year	Availability or hyperlink
	Minnesota Math Tiered Fidelity Inventory	2016	The tool is available to the public on request.
New York	New York State Self-Assessment Tool for RtI Readiness (targets elementary schools)	2010	https://nysrti.org/files/documents/resources/forms/new_york_state_self_assessment_tool_for_rti_readiness_as_word_doc_updated_1_8_14.pdf
	NYS Self-Assessment Tool for RTI Middle School Readiness & Implementation Survey - UNABRIDGED	2017	https://nysrti.org/files/resources/rti_tools_forms/unabridged_nys_mtss_self-assessment_-_middle_school.pdf
North Carolina	North Carolina Self-Assessment of MTSS (SAM)	2015	http://portfolio.du.edu/downloadItem/377501
North Dakota	NDMTSS Fidelity of Implementation Rubric	2014	https://www.nd.gov/dpi/uploads/194/2.NDMTSSFidelityofImplementationRubric.pdf
Oklahoma	OTISS Fidelity Assessment	2017	http://www.otiss.net/otiss-tools/
Oregon	District Implementation Evaluation Tool: School Based form (DIET-SB2)	2015	http://www.oregonrti.org/s/DIET-SB2-ORTIi-Coachs-Scoring-Guide-Final.docx
Pennsylvania	Using Response to Intervention for SLD Determination: School Building Application (K-12)	2017	https://www.pattan.net/getattachment/Multi-Tiered-System-of-Support/Response-to-Intervention-RTI/RTI-SLD-Determination/UsingResponseIntervention_SL.PDF/?lang=en-US
Texas	Campus Needs Assessment Tool (CNAT): Reading	2018	http://resources.buildingrti.utexas.org/booklets/CNAT_Reading_2018.pdf
	Campus Needs Assessment Tool (CNAT): Mathematics	2018	http://resources.buildingrti.utexas.org/booklets/CNAT_Mathematics_2018.pdf
Vermont	Vermont Multi-tiered System of Supports Response to Intervention and Instruction (MTSS-RtII) Self-Assessment	2014	http://vriuvmmtss.wpengine.com/wp-content/uploads/2014/06/MTSS-RtII-SelfAssessment-062014.pdf
Wisconsin	School-wide Implementation Review (SIR)	2015	https://www.wisconsinrticenter.org/assets/files/SIR/PrintFriendlySIR.pdf
	School RtI All-Staff Perception Survey	2016	https://www.wisconsinrticenter.org/assets/files/AllStaff/AllStaff%20Survey042016.pdf
Wyoming	MTSS Implementation Checklist for Literacy	2016	https://wyominginstructionalnetwork.com/wp-content/uploads/2018/05/MTSS-Implementation-Checklist_Literacy.docx

Source: Authors' in-depth analysis of tools from the website and document review and consultation with state officials in 2018.

Names of state tools not included in the in-depth analysis

Table B4 lists the names of the tools that were not included in the in-depth analysis. The information is organized by tool exclusion criteria and presented at the state level.

Table B4. Names of state tools not included in the in-depth analysis of multi-tiered system of supports/response to intervention implementation assessment tools

State and exclusion criterion	Assessment tool name
State is using only tools from other states or organizations without modification (*n* = 6)	
Arkansas	• State Capacity Assessment for Scaling Up Evidence-Based Practices (Fixen, Ward, Duda, Horner, & Blase, 2015) https://implementation.fpg.unc.edu/sites/implementation.fpg.unc.edu/files/NIRN-SCA-v25.3.pdf • District Capacity Assessment Version 6.0 (Ward et al., 2015) https://miblsi.org/sites/default/files/Documents/Evaluation/Capacity/DCA%206.2%20%20Final%20Print%207.30.15%20MI%20Insert.pdf • The Reading Tiered Fidelity Inventory Elementary-Level Edition (from Michigan's Integrated Behavior and Learning Support Initiative–MIBLSI) https://miblsi.org/sites/default/files/Documents/Evaluation/Fidelity/RTFI/website_March2018_R-TFI%20Elementary-Level%20Edition_v1.3.pdf • The Reading Tiered Fidelity Inventory Secondary-Level Edition (from the MIBLSI) https://miblsi.org/sites/default/files/Documents/Evaluation/Fidelity/RTFI/Jan_2018_R-TFI_Secondary-Level%20_Edition_v1.3_SECURED.pdf • The School-wide PBIS Tiered Fidelity Inventory (SWPBIS TFI) (Algozzine et al., 2014) https://www.pbis.org/Common/Cms/files/pbisresources/SWPBIS%20Tiered%20Fidelity%20Inventory%20%28TFI%29.pdf
New Hampshire	New Hampshire districts that were part of the SWIFT grant are using SWIFT fidelity tools. • Reading Tiered Fidelity Inventory (R-TFI) from MIBLSI http://guide.swiftschools.org/Common/Cms/Documents/Inclusive%2520Academic%2520Instruction/Reading%2520Tiered%2520Fidelity%2520Inventory.pdf • SWIFT Fidelity Integrity Assessment (SWIFT-FIA) http://www.swiftschools.org/sites/default/files/SWIFT-FIA%202.0%20Fillable.pdf
New Jersey	• Essential Components of RTI Integrity Rubric and Worksheet from the National Center on Response to Intervention at American Institutes for Research (AIR) https://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet • Colorado School RTI fidelity rubric http://www.rtinetwork.org/images/Colorado_School_RtI_Fidelity_Rubrics_2.pdf • Florida's Self-Assessment of Problem Solving Implementation (SAPSI) http://www.florida-rti.org/_docs/AppendixA.pdf • Checklist of Observable Processes during RTI Full Implementation (Developed by Susan L. Hall, Ed.D, for the RTI Action Network in 2008) http://www.rtinetwork.org/images/content/downloads/get%20started/hall_checklist.pdf
South Dakota	• Michigan's Integrated Behavior and Learning Support Initiative (MIBLSI) Reading Tiered Fidelity Inventory Elementary-Level Edition https://miblsi.org/sites/default/files/Documents/Evaluation/Fidelity/RTFI/website_March2018_R-TFI%20Elementary-Level%20Edition_v1.3.pdf • Michigan's Integrated Behavior and Learning Support Initiative (MIBLSI) Reading Tiered Fidelity Inventory Secondary-Level Edition https://miblsi.org/sites/default/files/Documents/Evaluation/Fidelity/RTFI/Jan_2018_R-TFI_Secondary-Level%20_Edition_v1.3_SECURED.pdf
Utah	• Essential Components of RTI Integrity Rubric and Worksheet from the National Center on Response to Intervention at American Institutes for Research (AIR) https://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet

State and exclusion criterion	Assessment tool name
Virginia	• State Capacity Assessment for Scaling Up Evidence-Based Practices (Fixen, Ward, Duda, Horner, & Blase, 2015) https://implementation.fpg.unc.edu/sites/implementation.fpg.unc.edu/files/NIRN-SCA-v25.3.pdf • District Capacity Assessment Version 6.0 (Ward et al., 2015) https://miblsi.org/sites/default/files/Documents/Evaluation/Capacity/DCA%206.2%20%20Final%20Print%207.30.15%20MI%20Insert.pdf • The School-wide PBIS Tiered Fidelity Inventory (SWPBIS TFI) (Algozzine et al., 2014) https://www.pbis.org/Common/Cms/files/pbisresources/SWPBIS%20Tiered%20Fidelity%20Inventory%20%28TFI%29.pdf
State is using a tool from another state or organization without modification and a general tool (*n* = 3)	
California	• Local Education Agency (LEA) Self-Assessment (Differentiated Assistance Protocols for LEAs – Facilitation Guide) http://ccsesa.org/wp-content/uploads/2018/05/Facilitators-Guide-v-2.7.pdf • Reading Tiered Fidelity Inventory (R-TFI) from MIBLSI http://guide.swiftschools.org/Common/Cms/Documents/Inclusive%2520Academic%2520Instruction/Reading%2520Tiered%2520Fidelity%2520Inventory.pdf • SWIFT Fidelity Integrity Assessment (SWIFT-FIA) http://www.swiftschools.org/sites/default/files/SWIFT-FIA%202.0%20Fillable.pdf • Essential Components of RTI Integrity Rubric and Worksheet from the National Center on Response to Intervention at American Institutes for Research (AIR) https://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet
New Mexico	• Student Assessment Team (SAT) Self-Assessment https://webnew.ped.state.nm.us/wp-content/uploads/2018/03/SAT-Self-Assessment.docx • Essential Components of RTI Integrity Rubric and Worksheet from the National Center on Response to Intervention at American Institutes for Research (AIR) https://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet
Ohio	• OIP Implementation Criteria & Rubric https://education.ohio.gov/getattachment/Topics/School-Improvement/State-Support-Teams/OIP-implementation-Rubric-7-2013.pdf.aspx • Reading Tiered Fidelity Inventory (R-TFI) from MIBLSI http://guide.swiftschools.org/Common/Cms/Documents/Inclusive%2520Academic%2520Instruction/Reading%2520Tiered%2520Fidelity%2520Inventory.pdf
State is using a tool from another state or organization without modification and has another tool under revision (*n* = 1)	
Rhode Island	• Data-based Individualization (DBI) Implementation Rubric and Interview from the National Center on Intensive Intervention https://intensiveintervention.org/resource/dbi-implementation-rubric-and-interview
State is using a tool that it developed or adapted from an existing tool and that is publicly available or accessible to the public, and state is using a tool from another state or organization without modification (*n* = 5)	
Illinois	• District Capacity Assessment Version 6.0 (Ward et al., 2015) https://miblsi.org/sites/default/files/Documents/Evaluation/Capacity/DCA%206.2%20%20Final%20Print%207.30.15%20MI%20Insert.pdf

State and exclusion criterion	Assessment tool name
Michigan	• 1. Fidelity assessments: Data to determine how many features of school-wide MTSS are in place in schools and the quality of their implementation. ➢ School-Wide Positive Behavioral Interventions & Supports (PBIS) Tiered Fidelity Inventory: School leadership teams need to know how well PBIS is implemented in the school. The SWPBIS TFI combines features from a variety of fidelity assessments. The result is a single, reliable, assessment to assist with implementing and sustaining the three tiers of PBIS. https://www.pbis.org/Common/Cms/files/pbisresources/SWPBIS%20Tiered%20Fidelity%20Inventory%20%28TFI%29.pdf • 2. Capacity Assessments: Used to determine if the Intermediate School District or district is in a position to effectively support schools. ➢ Regional Capacity Assessment: Intermediate School Districts assess their capacity to support constituent districts within their region to develop an implementation infrastructure to support the effective use of an integrated behavior and reading MTSS model. https://miblsi.org/evaluation/capacity-assessments/regional-capacity-assessment-%28rca%29 ➢ District Capacity Assessment: District Implementation Teams need to know how well their implementation infrastructure is supporting the effective use and sustainability of the components of an integrated behavior and reading MTSS model. https://miblsi.org/sites/default/files/Documents/Evaluation/Capacity/DCA%206.2%20%20Final%20Print%207.30.15%20MI%20Insert.pdf • 3. Scale-Up (Reach) Assessment: Knowing the correct stage of implementation helps Intermediate School Districts and districts identify the right training and coaching resources to support implementation plans. ➢ MIBLSI Stages of Implementation Indicators: Lists the features for each stage of implementation for Intermediate School Districts, districts, and schools that are partnering in the MIBLSI model. MIBLSI uses indicators that can be pulled directly from the project's MIBLSI database (MIDATA) for efficient assessment. https://miblsi.org/evaluation/reach-assessments/miblsi-stages-of-implementation-indicators
Vermont	Some Vermont schools are using: • Reading Tiered Fidelity Inventory (R-TFI) from MIBLSI http://guide.swiftschools.org/Common/Cms/Documents/Inclusive%2520Academic%2520Instruction/Reading%2520Tiered%2520Fidelity%2520Inventory.pdf • SWIFT Fidelity Integrity Assessment (SWIFT-FIA) http://www.swiftschools.org/sites/default/files/SWIFT-FIA%202.0%20Fillable.pdf
Wisconsin	• The Benchmarks of Quality https://www.pbis.org/common/cms/files/pbisresources/BoQ_TeamMemberRating_2010.pdf • The School-wide PBIS Tiered Fidelity Inventory (SWPBIS TFI) (Algozzine et al., 2014) https://www.pbis.org/Common/Cms/files/pbisresources/SWPBIS%20Tiered%20Fidelity%20Inventory%20%28TFI%29.pdf
Wyoming	• Essential Components of RTI Integrity Rubric and Worksheet from the National Center on Response to Intervention at American Institutes for Research (AIR) https://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet
State is using only a general tool (*n* = 1)	
Arizona	• The Comprehensive Needs Assessment and Integrated Action Plan for implementation (Appendix B: Individual Principle Rubrics for Use by Committees or Teams or Work Groups to Focus on One Principle) https://cms.azed.gov/home/GetDocumentFile?id=59a45aef3217e11590d74a91
State-developed tool is not publicly available (*n* = 1)	
Maryland	• TAP-IT digital portfolio. Requires account access. https://marylandlearninglinks.org/digital-portfolio/

State and exclusion criterion	Assessment tool name
Tool is in development (*n* = 4)	
Indiana	A tool is in development.
Iowa	A tool is in development.
Mississippi	A tool is in development.
Tennessee	A tool is in development.
Tool is under revision (*n* = 3)	
Massachusetts	A tool is under revision.
Hawaii	A tool is under revision.
West Virginia	A tool is under revision.
State verified not having a tool (*n* = 6)	
Delaware	No tool
District of Columbia	No tool
Georgia	No tool
Missouri	No tool
South Carolina	No tool
Washington	No tool

Source: Authors' in-depth analysis of tools from the website and document review in 2018.

Interview selection criteria

Table B5 shows the four criteria for selecting states to interview, as well as other factors guiding selection for interviews and the tool development process. State tools had to meet at least three of the following four criteria for the state to be considered for the interview sample: assesses MTSS/RTI practices considered critical by experts, includes a focus on reading/literacy, aligns with the Tennessee Department of Education's (TDOE) purpose for districts and schools to assess implementation fidelity or progress in schools for making improvements, and shows evidence that the state has used the tool for its intended purpose. In addition, the study team took into consideration other factors (tool was pilot or field tested to ensure items and instructions were clear and tool had a report of technical adequacy information) and the tool development process (developed a new tool or adapted an existing tool).

Table B5. Interview selection criteria

Criterion	Florida	Kansas	North Carolina	Oregon	Pennsylvania	Vermont	Wisconsin	Wyoming
Interview selection criteria from proposal (met 3 of the 4 criteria)								
Assesses MTSS/RTI practices considered critical by experts (at least one of the state's tools addressed 75 percent of the key RTI components)	✓	✓	✓	✓	✓	✓	✓	✓
Includes a focus on reading/ literacy (includes items about reading/ literacy, or the tool can be viewed through a reading/ literacy lens)	✓	✓	✓	✓	✓	✓	✓	✓
Aligns with TDOE's purpose for districts and schools to assess implementation fidelity or progress in schools for making improvements	✓	✓	✓	✓	✓	✓	✓	✓
Shows evidence that the state has used the tool for its intended purpose (for example, state reports results from tool use or offers training on tool use)	✓	✓	✓	✓	✓	✓	✓	✓
Other factors guiding interview selection (best practices in tool development)[a]								
Tool was pilot or field tested to ensure items and instructions were clear	✓	✓		✓		✓	✓	
Report technical adequacy information about tool[b]								
Tool development process								
Developed a new tool	✓	✓		✓	✓	✓	✓	✓
Adapted an existing tool		✓	✓	✓				

MTSS is multi-tiered system of supports. RTI is response to intervention. TDOE is Tennessee Department of Education.
Note: Key RTI personnel and leadership at TDOE also provided suggestions about states of interest to them, such as North Carolina and Wisconsin.
a. Based on Colton and Covert (2007).
b. Information has been suppressed to protect the anonymity of the two states meeting this selection criteria.
Source: Authors' in-depth analysis of tools from the website and document review in 2018.

Website and document review protocol

The website and document review protocol describes the information the study team recorded when reviewing states' MTSS/RTI website and documents.

Sources form

SO1. Source number (state abbreviation, e.g., _01)

SO2. Source title (title of document)

SO3. Source date retrieved

SO4. Source description (if not clear based on the title)

SO5. Source attachment (if applicable)

State Name Link to the appropriate state

State-Coder (The name on the "State" form will appear)

States form

S1. State name

S2. Coder name

S3. What is the name of the state's RTI or MTSS framework?
[Select one choice from dropdown menu, or "Add New Choice"]

S4. Does the state have an assessment tool to measure RTI implementation?
[Check all that apply in dropdown menu. Depending on how you answer this question, different follow-up questions will appear.]
REMINDER: You will only complete the "Assessments" form in QuickBase if you select "Yes, tool(s) tailored to the state."

- Yes, tool(s) are tailored to the state
  - IF the above response is selected:
    - **S4a**. How many assessment tools does the state have for assessing implementation of RTI?
- Yes, tool(s) are from other states or organizations
  [The tool is NOT state-specific (that is, it is not customized or modified). This includes AIR's National Center on Response to Intervention Fidelity of Implementation Rubric and Worksheet if it has NOT been adapted or modified.]
  - This needs to be a tool for assessing RTI or MTSS implementation. It cannot just be a resource.
  - If you only select, "Yes, tool(s) are from other states or organization," you do NOT need to complete the "Assessments" form in QuickBase. You only need to complete the "Sources" and "State" forms.
  - IF the above response is selected:
    - **S4b**. Provide the names of the non-state-specific tool(s) and authors.
- No
  - IF "No" is selected:
    - **S4c**. Please list the websites searched to confirm that an assessment tool to measure RTI implementation is not present on the state's website.
    - **S4d**. Does the state provide information or links about supporting implementation of the RTI or MTSS framework?
      - IF "Yes":
        - **S4di**. Provide a description of RTI implementation resources, including the names of any external resources referenced

S5. What office/agency/division within the state department of education oversees implementation of RTI?
[text]

S6. Is special education part of the agency/department that helps to implement or oversee implementation of RTI?
[Select yes or no]

S7. List the name, title, and contact information for lead state RTI or MTSS personnel and a lead state representative for special education.

- Remember to copy and paste the URL for where you found contact information.
- Please include the **name, position, email, and phone number** for each contact.

More detailed instructions: Record the names of three to five individuals who meet the following criteria to participate in a potential follow-up interview. The individual should be responsible for overseeing RTI implementation and/or tool development, training staff to use the assessment tool, and using the RTI implementation assessment tool. Please include a lead state representative for the RTI or MTSS program, a lead state representative for special education, a representative in charge of overseeing RTI or MTSS implementation, and RTI or MTSS program staff. You may include the name of a contractor or consultant if appropriate.

S8. Does the state provide links to ***other*** state RTI or MTSS webpages or resources that are NOT tool-specific? If so, list which states.

S9. Please provide information about the state's RTI or MTSS framework that you think will be important for TN partnership members to know (e.g., information about evaluations of their RTI or MTSS framework; grant funding or pilot studies related to RTI or MTSS). Make sure to include URLs.

S10. Provide any information about whether the state shifted from using an RTI to an MTSS framework, or whether the state plans to transition from an RTI to MTSS framework.

State form questions for the team to discuss

[Use this space to write down any questions or issues that came up.

Assessment form

State Name
Coder Name

A1. Assessment tool name
[text]

Sources

AS1. What sources were used for answering questions about this assessment tool?
[link to 'Sources' Form. There will be a dropdown menu of options. Click the appropriate box]

Basic Information

ABI1. Is the tool intended to measure implementation at the district, school, or classroom level?
[Check all that apply in dropdown menu. There is also an option to "Add a New Choice."]

ABI2. What is the topical focus of the assessment tool?
[Check all that apply in dropdown menu. There is also an option to "Add a New Choice."]

ABI3. What is the publication date of the assessment tool?

- Use the date on the document (not the file name). Only use the date provided in the file name if you CANNOT find the publication date anywhere on the document.

[text]

ABI4. What type of assessment tool is it?
[Check the appropriate response. There is also an option to "Add a New Choice."]

ABI5. What is the intended purpose of the assessment tool?
[text]

ABI6. What personnel are intended to administer the assessment tool?
[text]

ABI7. What personnel are intended to use the data collected from the assessment tool?
[text]

Domains and rating scale

ADRS1. How many domains (or higher order categories) are included in the assessment tool?
[Numeric]

ADRS2. Describe the domains AND components (provide the domain and component labels and indicate the number of items in parentheses after each domain).
[Text]

ADRS3. How many total items does the assessment tool include?
[Numeric]

ADRS4. What type(s) of information or evidence do personnel use to assign ratings/scores on the assessment tool (for example, direct observations, interventionists' data, a team reaches a consensus score)?
[Text]

- On some assessment tools, there might be an additional column in the tool that provides information about the type of evidence raters should be using.

ADRS5. Describe the assessment tool's rating scale (i.e., copy and paste a description of the labels and definitions for rating categories)
[Text]

ADRS6. How many points are on the rating scale?
[Numeric]

ADRS7. Is information available about how to interpret ratings/scores or about fidelity thresholds for the assessment tool?
[Yes, No]

Definition of fidelity thresholds - "Fidelity thresholds are numeric scores that are used to define different levels of fidelity of a specific indicator. Represented as numeric scales, thresholds quantify the extent to which an indicator was enacted with fidelity. This scale can be dichotomous (for example, 0 = inadequate fidelity or 1 = adequate fidelity) or it can have a range of fidelity levels (for example, 0 = low fidelity, 1 = moderate fidelity, and 2 = high fidelity). Further, the project team can define levels of fidelity as low/moderate/high based on the total score across indicators/components or based on the percentage of indicators/components fully met." (Lammert, Heinemeier, Schaff, Fiore, & Howell, 2016, p. 114).

- IF "Yes"
  - **ADRS7i.** Copy and paste a text description about how to interpret ratings/score or the fidelity thresholds.

Tool development

ATD1. Who was involved in the development of the assessment tool for measuring RTI implementation?
[Text]

ATD2. Has the assessment tool been piloted?
[Yes, No]

- IF "Yes"
  - **ATD2a.** If yes, describe pilot testing. (Copy and paste a description, reference source # and page #)

ATD3. What was the process for developing the assessment tool?
(Copy and paste a text description of the process for developing and/or refining the assessment tool, including who was involved and what steps the state took.)

ATD4. Is there information about the reliability and validity of the assessment tool? IF yes, mark the appropriate boxes below.
[Yes, No]

- **ATD4a.** Inter-rater agreement
  - IF checked:
    - **ATD4ai.** Describe how inter-rater validity was determined. (Copy and paste a text description)
- **ATD4b.** Construct validity
  - IF checked:
    - **ATD4bi.** Describe how construct validity was determined. (Copy and paste a text description)
- **ATD4c.** Face validity
  - IF checked:
    - **ATD4ci.** Describe how face validity was determined. (Copy and paste a text description)

Key RTI practices

AKPI1. Does the tool include items about multiple tiers of instruction? IF yes, check the appropriate boxes below.
[Yes, No]

AKP2. Does the tool include items about data-based decision-making? IF Yes, check the appropriate boxes below.
[Yes, No]

AKP3. Does the tool include items about staffing roles/infrastructure for implementation/leadership? IF Yes, please check the appropriate boxes below.
[Yes, No]

AKP4. How does the state define "evidence-based interventions" (that is, what criteria are used)?
[Text]

Supporting assessment tool use

ATU1a. What personnel are trained to administer the assessment tools?

- There needs to be explicit evidence stating that people are TRAINED to ADMINISTER the tool.

[Text]

ATU1b. What training or support do personnel receive on the administration of the assessment tool?

[Check all that apply in dropdown menu. There is also an option to "Add a New Choice."]

- Training needs to be specific to the tool (do NOT include training that is about any aspect of the state's RTI or MTSS framework).
  - IF you select "In-person training":
    - **ATU1bi.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): in person training
  - IF you select "1-on-1 coaching":
    - **ATU1bii.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): 1-on-1 coaching
  - IF you select "technical assistance":
    - **ATU1biii.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): technical assistance
  - IF you select "Webinars":
    - **ATU1biv.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): webinars
  - IF you select "Online self-paced course":
    - **ATU1bv.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): online self-paced courses/modules
  - IF you select "Other":
    - **ATU1b_oth.** Describe "Other"
    - **ATU1bvi.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): Other

ATU2a. What personnel are trained to use the data collected from the assessment tool?

- There needs to be explicit evidence stating that people are TRAINED to USE the data collected from the tool.

  Definitions: Data use includes managing or uploading data to a system, preparing data to facilitate conversations, and analyzing or interpreting data for its intended purpose.

[Text]

ATU2b. What training or support do personnel receive regarding using the RTI Implementation assessment tool data?

[Check all that apply in dropdown menu. There is also an option to "Add a New Choice."]

- IF you select "In-person training":
  - **ATU2bi.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): in person training
- IF you select "1-on-1 coaching":
  - **ATU2bii.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): 1-on-1 coaching
- IF you select "technical assistance":

- **ATU2biii.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): technical assistance
- IF you select "Webinars":
  - **ATU2biv.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): webinars
- IF you select "Online self-paced course":
  - **ATU2bv.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): online self-paced courses/module
- IF you select "Other":
  - **ATU2b_oth.** Describe "Other"
  - **ATU2bvi.** Describe how often the training/support is offered and for what length of time (e.g., days/hours): Other

ATU3. What types of resources and documents are available to support personnel in using the state's RTI implementation assessment tool (e.g., guidance document, technical manual)? List the names of the documents here, AND document in the Sources Form. *Copy and paste the URL*

ATU4. What are the state's guidelines for how often or when the assessment tool should be used?
[Check response from dropdown menu.]

- IF you select "Other":
  - **ATU4i.** Describe "Other"
- IF you select "Additional details":
  - **ATU4i.** Provide additional details

ATU5. Who receives or has access to the results of the assessment tool for measuring RTI implementation?
(Copy and paste a description OR state this information is not available)

ATU6. How are states supposed to use the information collected through the RTI implementation assessment tool?
(Copy and paste a description OR state this information is not available)

- This can include what they've already done with the assessment tool results, OR it may be a description of what should happen with the results from the implementation assessment tool.

ATU7. How is technology used to support RTI implementation data collection and use?
[Check all that apply in dropdown menu. You can also "Add a New Choice"]

Interview criteria

This section is intended to identify whether the state's assessment tool meets the criteria for state personnel to participate in an interview. Check each criterion that is met. If you are unsure, please note this in the area for "Assessment form questions for the team to resolve."

- **IC1.** The assessment tool measures RTI practices considered critical by RTI experts (Gersten et al., 2008) and the research literature.
- **IC2.** The assessment tool includes a focus on reading and/or literacy, because improving literacy in the early elementary grades is one of the Tennessee Early Literacy Partnership's goals.
- **IC3.** The assessment tool aligns with TDOE's purpose for districts and schools to assess fidelity of implementation in schools for making improvements.
- **IC4.** There is evidence that the state has used the assessment tool for its intended purpose (for example, the state reports results from assessment tool use, the state has offered training on how to use the assessment tool).

Questions for the team

Assessment form questions for the team to resolve

[Use this space to write down any questions or issues that came up, or recommendations for how we may want to modify the form]

Methods for coding and analyzing key multi-tiered system of supports/response to intervention practices

This section describes the process that the study team used to define key MTSS/RTI practices; provides definitions of components, subcomponents, and dimensions; describes the systematic process for coding key MTSS/RTI practices; and describes the analyses used to examine whether key MTSS/RTI practices varied by state framework terminology.

Process for defining key practices. To define MTSS/RTI practices for measuring implementation, the study team referred to established practice guidelines, supporting research literature, state instruments and instruments from national organizations, and technical expert review. To identify the key practices to include in the review of tools, the study team followed a similar rationale to that used for *Evaluation of the Response to Intervention Practices for Elementary School Reading* (Balu et. al., 2015; see appendix A for supporting research literature). This rationale identifies the types of practices for inclusion in MTSS/RTI frameworks:

- Practice guidelines that experts recommend, such as administering universal screening at least twice a year to all students, using reliable and valid screening tools, varying instructional intensity by varying group size and dosage, monitoring tier 2 students monthly, and monitoring tier 3 students weekly.
- Practices critical to all MTSS/RTI models, such as using data to make decisions about targeting interventions, to monitor progress, to tie interventions to core curriculum, and to individualize tiers 2 and 3.
- Practices that support MTSS/RTI implementation, such as staff supports.

The study team then referred to the research literature (see appendix A) to define the key MTSS/RTI practices more fully.

Also included was "using evidence-based practices" as referenced in federal legislation. Both the Every Student Succeeds Act (2015) and the Individuals with Disabilities Education Improvement Act (2004) require states to support districts and schools in using instructional programs and interventions that have evidence to show that they are effective at producing results and improving student outcomes when implemented.

Next, the study team reviewed state instruments (for example, those in Florida, New Hampshire, and Wisconsin) and instruments from national organizations (for example, National Center for Response to Intervention and RTI Action Network) to identify the practices and how they were organized. From that review, the study team identified the four broad components (administer assessments, offer multiple tiers of instruction and intervention, support data-based decisionmaking, and support infrastructure practices for MTSS/RTI implementation) and developed a hierarchy of the subcomponents and dimensions under the four key components.

Finally, as part of the technical review, experts in MTSS/RTI, positive behavioral interventions and supports, reading research, and data-based decisionmaking reviewed the MTSS/RTI key practices. They concluded that the rationale for the key practices was well documented.

Definitions of components, subcomponents, and dimensions. The framework for coding key MTSS/RTI practices is hierarchical. At the highest level, it includes four broad *components* or main features of MTSS/RTI (for example, administer assessments). These components comprise more detailed *subcomponents* or specific aspects within a component (for example, administer universal screening measures). For coding purposes, a component was

considered to be addressed only if it comprised all associated subcomponents. For example, a tool was considered to address the component "administer assessments" only if it included items that addressed both of its subcomponents: administer universal screening measures and administer progress monitoring measures.

Subcomponents are then broken down further into *dimensions* that help define and measure the subcomponents (for example, use reliable and valid screening tools).

An *item* is a statement of performance on the measurement tool.

Systematic process for coding key practices. The study team used a systematic and replicable process for reviewing and coding each MTSS/RTI implementation assessment tool. Decision rules were used to code for the presence or absence of each key MTSS/RTI component, subcomponent, and dimension (table B6).

Tools may have directly or indirectly included a specific practice. The study team coded for the presence of components, subcomponents, and dimensions if the tool either directly stated that criteria should be in place by using item terminology that was identical or similar to the coding scheme established for the study or indirectly indicated that criteria should be in place by embedding the criteria as part of a different item that covered other MTSS/RTI practices.

Below are two examples that illustrate how the study team applied these decision rules to the MTSS/RTI subcomponent key practice "administer universal screening measures." Example 1 shows tool documentation that directly states that universal screening should be in place, whereas example 2 illustrates the use of language that indirectly indicates this requirement.

> **Example 1**: North Dakota's tool has a specific item called "universal screening," and the criteria for the ideal level of implementation (that is, a rating of 5 compared with a rating of 1 or 3) states: *All of the following are met: (1) screening is conducted for all students (i.e., is universal); (2) procedures are in place to ensure implementation accuracy (i.e., all students are tested, scores are accurate, cut points/decisions are accurate); and (3) a process to screen all students occurs more than once per year (e.g., fall, winter, spring).* (p. 1)
>
> In this case the tool directly describes the MTSS/RTI subcomponent practice "administer universal screening measures" and would be coded as present. The tool also directly describes the dimensions of "administer at least twice a year" and "include all students," which would also be coded as present.
>
> **Example 2**: Kentucky's tool does not have an item labeled "administer universal screening measures" but does have the following item: *Diagnostic Assessments and Progress Monitoring—after students are identified with a universal screener, a diagnostic assessment is in place to accurately identify areas of strength and weakness so interventions can be targeted and consistent progress monitoring matches the targeted skill and is used to drive instruction.* (p. 2)
>
> Although Kentucky's tool does not directly state that universal screening must be in place, the item indirectly conveys this because a diagnostic assessment would be conducted only after the student is identified from a universal screening. Therefore, the study team coded as present the subcomponent "administer universal screening measures" for this tool.

A third example shows how the study team applied coding procedures when a tool could meet criteria for a component, subcomponent, or dimension if any part of an item directly or indirectly specifies a key MTSS/RTI practice.

> **Example 3**: Michigan's R-TFI [Elementary] tool (p. 40) has an item that states, *Staff collect progress monitoring data with fidelity*. The description of this item at the ideal implementation level (that is, the criteria for receiving 2 points for this item on a scale of 0–2) states, *The frequency of progress monitoring is <u>at least</u> once per week for students receiving Tier 3 interventions, and every other week for students receiving Tier 2 interventions.*

The study team coded this item as meeting the key criteria for the dimension, "administer progress monitoring measures monthly at tier 2 and weekly at tier 3," even though Michigan's overarching item is broader than this study's key practice. That is, Michigan's item is about staff collecting progress monitoring data with fidelity, whereas this study's practice focus is on collecting progress monitoring data and on how frequently to collect it (figure B1).

Figure B1. Screenshot from Michigan's Reading Tiered Fidelity Inventory [Elementary] tool

R-TFI Item	2 Points	1 Point	0 Points	Data Source
2.10 Staff collect **progress monitoring** data with **fidelity**.	The school administers progress monitoring assessments in reading to all students receiving reading intervention. -AND- Measures selected for progress monitoring match the critical skills and grade level of the identified need(s) for intervention. -AND- Staff adhere to standard administration and scoring protocols. -AND- The frequency of progress monitoring is at least: • Once per week for students receiving **Tier 3** reading interventions. • Every other week for students receiving **Tier 2** interventions.	The school administers progress monitoring assessments in reading to all students receiving reading intervention. -AND- Measures selected for progress monitoring match the critical skills and grade level of the identified need(s) for intervention. -AND- Staff adhere to standard administration and scoring protocols. -AND- The frequency of progress monitoring does not meet minimum conditions outlined in the 2-point response.	The school does not administer progress monitoring assessments to all students receiving intervention. -OR- Measures selected for progress monitoring do not match the critical skills and grade level of the identified need(s) for intervention. -OR- Staff do not adhere to standard administration and scoring protocols.	Progress monitoring schedule Progress monitoring graphs Shadow scoring protocol

Source: Authors' in-depth analysis of tools from the website and document review in 2018.

Table B6. Decision rules for applying multi-tiered systems of supports/response to intervention practice codes to states' assessment tools

Code	Assessment tool coding category	Coding decisions: Tool was coded "yes" if…	Example[a]
Administer assessments	Component	It addresses both universal screening practices and progress monitoring practices subcomponents.	
Administer universal screening measures	Subcomponent	Items directly or indirectly state that universal screening assessments should be administered.	*Universal screening system assesses strengths and challenges of all students in academic achievement, talents, and behavior* (Arkansas, p. 54).
Establish end-of-year benchmarks	Dimension	Items directly or indirectly state that benchmarks or cutscores should be established.	*Delivery of universal curriculum and instruction is determined by grade-level/course benchmarks* (Wisconsin [All Staff], p. 2).
Administer at least twice a year	Dimension	Items directly or indirectly state that screening should occur at least twice a year, such as in a description of the schedule, a description of the schedule referencing two (or more) administrations, or the use of terminology conveying more than one (such as multiple).	Item: *We closely, frequently, and systematically assess students and make regular and effective use of the data we collect to make decisions.* Description of implementation: *The assessment system provides information about all students at least 3 times each year to determine progress toward standards-based objectives and to identify students who are at risk and/or not responding to instruction/intervention* (Vermont [Self-Assessment], p. 23).
Use reliable and valid screening tools	Dimension	Items directly or indirectly state that universal screening measures should be reliable and valid through use of the following terminology: • Reliable or valid. • High-quality. • Evidence-based. • Research-based.	*Evidence indicates that the screening tools are reliable, correlations between the instruments and valued outcomes are strong, predictions of risk status are accurate, and staff is able to articulate the supporting evidence* (North Dakota, p. 1). Note: Another item specifies administration of universal screening.
Include all students	Dimension	Items directly or indirectly state that screening should occur for all students.	*My school/district has established a regular schedule for screening ALL students in grades K–4 a minimum of three times per year* (New York [Elementary], p. 7).

Code	Assessment tool coding category	Coding decisions: Tool was coded "yes" if…	Example[a]
Administer progress monitoring measures	Subcomponent	Items directly or indirectly state that progress monitoring assessments should be administered.	*Teachers use progress monitoring data to evaluate instructional effectiveness and to be informed about the changes necessary to better meet students' needs (e.g., Data Teams)* (Connecticut, p. 4).
Administer progress monitoring measures monthly at tier 2 and weekly at tier 3	Dimension	Items directly or indirectly state that progress monitoring assessments should be administered at least monthly at tier 2 and weekly at tier 3. General descriptions of how often progress monitoring measures should be administered convey that progress monitoring never occurs less often at any tier. For example, items using terminology that does not quantify the number of times to measure at each tier (such as "measures should be administered based on research") were not coded as meeting criteria.	*Both of the following conditions are met: (1) progress monitoring occurs at least monthly for students receiving Tier 2/Strategic intervention and at least weekly for students receiving Tier 3/Intensive intervention; and (2) procedures are in place to ensure implementation accuracy (i.e., appropriate students are tested, scores are accurate, decision-making rules are applied consistently)* (North Dakota, p. 3).
Use reliable and valid progress monitoring tools	Dimension	Items directly or indirectly state that progress monitoring measures should be reliable and valid through use of the following terminology: • Reliable and valid. • High-quality. • Evidence-based. • Research-based.	*The BLT [building leadership team] administers high quality, student-level progress monitoring tools to analyze student performance in academic and behavioral domains* (Colorado [BLT], p. 2).

Code	Assessment tool coding category	Coding decisions: Tool was coded "yes" if…	Example[a]
Offer multiple tiers of instruction and intervention	Component	It addresses at least three tiers of instruction and intervention.	
Offer tier 1 instruction	Subcomponent	Items directly or indirectly state that tier 1, also referred to as *core instruction*, should be in place. Tier 1 was coded as being offered if the tool explicitly refers to tier 1 or describes elements of tier 1 instruction, including high-quality classroom-based instruction, use of evidence-based programs, programs tied to standards-based curriculum, and use of differentiated instruction as part of a core program.	*Tiered reading instruction includes:* • *Tier 1 evidence-based core curriculum* • *Tier 1 differentiated instruction* • *Tier 2 individualized and small group interventions* • *Tier 3 individualized and small group interventions* (Oklahoma, p. 6).
Use evidence-based programs	Dimension	Items directly or indirectly state that an evidence-based program should be used in the core curriculum/tier 1 through use of the following terminology: • Evidence-based. • Research-based. • Research-validated.	*Use of a research-validated core reading program, core math program, writing program, and behavior [program] at each elementary or secondary school identified as RTI ready with 80% success rate* (Arkansas, p. 53).
Tie to standards-based curriculum	Dimension	Items directly or indirectly state that the core curriculum should be tied to state or national content standards.	*The core curriculum (reading and math) is aligned with the North Dakota state standards* (North Dakota, p. 7).
Address differentiation of instruction	Dimension	Items directly or indirectly state that differentiation of instruction should occur during core instruction/tier 1.	*Core Instruction with Differentiation—a variety of teaching strategies to address diverse learners (e.g., questioning techniques, role playing, manipulatives, literature circles, movement activities, project-based learning, flexible groups, etc.)* (Kentucky, p. 2).
Offer tier 1 to all students	Dimension	Items directly or indirectly state that tier 1 should be offered to all students.	*The BLT manages and monitors the provision of high-quality, prevention-based, Universal (Tier 1) supports that are accessible to every student and meet the needs of most students* (Colorado, p. 4).

Code	Assessment tool coding category	Coding decisions: Tool was coded "yes" if…	Example[a]
Offer tier 2 intervention	Subcomponent	Items directly or indirectly state that students who are not meeting grade-level expectations should be provided increased instructional intensity. Tier 2 was coded as being offered if the tool explicitly refers to tier 2 or describes varying the instructional intensity, such as providing an intervention, individualizing instruction, group size, and/or dosage. If a tool conveys that there are at least two tiers but does not distinguish a third tier, the tool provides credit for offering tier 2 but not tier 3.	*Tier 2 (Supplemental) academic practices exist that include strategies addressing integrated common student needs, are linked to Tier 1 instruction, and are monitored using assessments/data sources tied directly to the academic, behavior, and social emotional skills taught* (North Carolina, p. 10).
Require consideration of group size and dosage	Dimension	Items directly or indirectly state that group size and dosage should be adjusted to increase intensity in tier 2.	*Additional or supplemental instructional time (at least 20–30 minutes per session, 3–4 times per week) is offered in addition to the 90+ minutes provided in core reading instruction.* *Tier 2 interventions are delivered in small group formats (no more than 5 or 6 students per group); groups are homogenous* (New York, p. 5).
Tie to core curriculum	Dimension	Items directly or indirectly state that tier 2 instruction is tied or linked to core curriculum, sometimes referred to as *tier 1.*	*Tier 2 (Supplemental) academic practices exist that include strategies addressing integrated common student needs, are linked to Tier 1 instruction, and are monitored using assessments/data sources tied directly to the academic, behavior, and social-emotional skills taught.* (North Carolina, p. 10)
Use evidence-based interventions	Dimension	Items directly or indirectly state that interventions at tier 2 should be evidence based, using terminology such as: • Evidence-based. • Research-based. • Research-validated.	*For assessment of learning at the SELECTED AND INTENSIVE levels, use evidence-based interventions for students not meeting benchmarks* (Wisconsin, p. 1).
Provide individualized instruction	Dimension	Items directly or indirectly state that students should be provided instruction that meets their specific needs.	*Diagnostic assessment data are used to inform decisions about strategic and intensive reading interventions for individual students* (Kansas [Instructional Staff Survey], p. 1).

Code	Assessment tool coding category	Coding decisions: Tool was coded "yes" if…	Example[a]
Offer tier 3 intervention	Subcomponent	Items directly or indirectly state that students who are considered far below grade level should be provided intensive, individualized instruction. Tier 3 was coded as being offered if the tool explicitly refers to tier 3 or describes individualizing instruction or increasing intensity beyond tier 2 practices.	*Students who require even more intensive or specialized instruction receive additional intervention services and supports, including, but not limited to, Special Education services [Tier 3]* (Vermont, p. 19).
Require consideration of group size and dosage	Dimension	Items directly or indirectly state that group size and dosage should be adjusted to increase intensity in tier 3.	*Intervention intensity is determined through review of data for considerations about frequency, duration, size of grouping, and effectiveness of instruction/intervention* (Connecticut, p. 1).
Tie to core curriculum	Dimension	Items directly or indirectly state that tier 3 instruction should be tied or linked to core curriculum, sometimes referred to as *tier 1*.	Element: *Tier 3 (intensive) academic practices exist that include integrated strategies that are developed based on students' needs, are aligned with Tier 1 and Tier 2 instructional goals and strategies, and are monitored using assessments/data sources that link directly to skills taught.* Description: *Tier 3 strategies incorporate **all of the following**:* • *developed based on students' needs across academic, behavior and social-emotional domains* • *aligned with Tier 1 and Tier 2 instruction* • *linked to behavior and social- emotional content/instruction* • *monitored using assessments/data sources that link directly to the skills taught* (Illinois, p. 16).
Use evidence-based interventions	Dimension	Items directly or indirectly state that interventions at tier 3 should be evidence based, using terminology such as: • Evidence-based. • Research-based. • Research-validated.	*Student needs are met via design and delivery of increasingly robust differentiated instruction that is aligned across the tiers to grade level standards. Empirically-supported instructional strategies and standard treatment/protocol interventions are used to facilitate student response to instruction and expedite learning/growth.* (Pennsylvania, p. 10) Note: Other items in the tool establish practices of multiple tiers.
Provide individualized instruction	Dimension	Items directly or indirectly state that students should be provided instruction that meets their specific needs.	*Student Intervention Plans—plans are individualized and constantly changing as the needs of the student change* (Kentucky, p. 2).

Code	Assessment tool coding category	Coding decisions: Tool was coded "yes" if…	Example[a]
Support data-based decisionmaking	Component	It addresses data-based decisionmaking.	
Establish data rules	Subcomponent	Items directly or indirectly state that there should be explicit guidelines for using data to make decisions about student performance.	*Item: Processes, procedures, and decision-rules are established for data-based problem-solving.* *Description of implementation: Processes, procedures, and decision-rules needed to engage in data-based problem-solving are developed and existing structures and resources are incorporated,* ***and*** *The steps of problem-solving; procedures for accessing, submitting, and using data; and decision-rules needed to make reliable decisions are communicated to staff,* ***and*** *Data-based problem-solving processes, procedures, and decision-rules are refined based on data and feedback from staff, schedule changes, and resource availability* (Florida, p. 4).
Use tier 2 and 3 progress monitoring data to determine responsiveness to interventions	Dimension	Items directly or indirectly state that tier 2 and 3 data (sometimes referred to as *progress monitoring data*) should be used to determine responsiveness to interventions.	*For assessment of learning at the SELECTED AND INTENSIVE levels, we frequently review progress-monitoring data to gauge whether students are making adequate progress in response to the interventions/challenges and adjust accordingly* (Wisconsin, p. 2).
Use multiple sources of data to inform decisions	Dimension	Items directly or indirectly state that multiple sources of data should be used to make decisions regarding students. Data may be within a content area (for example, multiple literacy assessments) or across content areas (for example, examining literacy and behavior assessments).	*The school uses a variety of data sources to design intensive math intervention plans* (Minnesota, p. 45).
Use analysis of tier 2 and 3 progress monitoring data inclusive of slope of improvement or progress toward attainment of a goal	Dimension	Items directly or indirectly state that tier 2 and tier 3 data (sometimes referred to as *progress monitoring data*) should be reviewed in the context of progress toward a specific goal, sometimes presented as a *rate of improvement*.	*Both conditions are met: 1) decisions about RTI are based on reliable and valid PM [progress monitoring] data to reflect rate of improvement or final status; 2) decisions are implemented accurately* (Idaho, RTI Rubric Excel sheet, row 58, columns R–V).

Code	Assessment tool coding category	Coding decisions: Tool was coded "yes" if…	Example[a]
Support infrastructure practices for MTSS/RTI implementation	Component	It addresses both staffing for data-based decisionmaking practices and availability of coaching to support implementation practices.	
Establish building-level implementation teams	Subcomponent	Items directly or indirectly state that staff should be organized to monitor MTSS/RTI implementation and make data-based decisions (that is, have established building or grade-level teams for evaluating data).	*School Implementation Team—team members understand roles and meet regularly to discuss school wide implementation (e.g., schedule, data, criteria for tier movement, resources, etc.)* (Kentucky, p. 2).
Allocate time for teams to meet	Dimension	Items directly or indirectly state that time should be set aside for building- or grade-level teams to meet to discuss MTSS/RTI implementation.	*Schedules provide adequate time for staff to engage in collaborative, data-based problem-solving and decision-making* (Illinois, p. 10).
Evaluate individual student progress using screening and progress monitoring data	Dimension	Items directly or indirectly state that building- or grade-level teams should meet to evaluate screening and progress monitoring data (sometimes referred to as *assessment data*) of individual students.	*Staff understand and have access to academic, behavior, and social-emotional data sources that address the following purposes of assessment:* • *identify students at-risk academically, socially, and/or emotionally* • *determine why student is at-risk* • *monitor student academic and social-emotional growth/progress* • *inform academic and social emotional instructional/intervention planning* • *determine student attainment of academic, behavior and social emotional outcomes* (Florida, p. 11).
Use a problem-solving approach for decisionmaking	Dimension	Items directly or indirectly state that a problem-solving approach for decisionmaking should be used by building- or grade-level teams.	*My building leadership team regularly engages in formal problem solving using data to make decisions* (Kansas [Administrator Survey], p. 3).
Offer coaching to support implementation (for example, to understand data)	Subcomponent	Items directly or indirectly state that coaching should be available to support implementation of MTSS/RTI. Coaching support may be general or address specific topics related to MTSS/RTI.	*Coaching is used to support MTSS implementation* (North Carolina, p. 5).

MTSS is multi-tiered systems of supports. RTI is response to intervention.

a. The examples come from the tools listed in table B4.

Source: Author-developed coding scheme and decision rules for analyzing states' MTSS/RTI implementation assessment tools for evidence-based practices in 2018.

Analyses to examine whether key MTSS/RTI practices varied by state framework terminology

The study team also examined whether the percentage of key MTSS/RTI practices included in each tool varied according to whether the state referred to its framework as MTSS or RTI. No consistent differences emerged. For example, 6 of the 9 states that reported using an RTI framework used a tool that addressed both academics and behavior (see appendix E). Because some state personnel use the terms *MTSS* and *RTI* interchangeably, this lack of difference in tool content is not surprising.

References

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Appendix C. Interview protocol

This appendix contains the interview protocol that the study team used to conduct semi-structured interviews with state education officials in eight states to learn more about the how states adapted or developed their assessment tools for multi-tiered system of supports (MTSS)/response to intervention (RTI) and supported schools and districts in using the tools and resulting data.

* * *

Introduction and purpose of interview

Thank you for your willingness to participate in this interview. We are talking with you about how your state selected, adapted, or developed an assessment tool for measuring response to intervention (RTI) implementation [or MTSS][6] and is using the results from the assessment tool. We'd like to learn about what is working well in addition to the challenges and how you're working to overcome them. We believe information about your experiences will be valuable for other states interested in developing and using an assessment tool for measuring RTI implementation. This interview will take approximately 75–90 minutes.

Consent process

There are no anticipated or known risks in participating in this study. Your participation in the interview is voluntary. If you decide to participate, you may discontinue your participation in the interview at any time without penalty of any kind.

Do you agree to participate in this phone interview?

We will also be taking notes and recording the interview for our own note-taking purposes. Again, these notes and recordings will not be shared with anyone outside the study team. Do you consent to be recorded?

✪ Denotes that the interviewer will ask for additional documents.

Description and development of the assessment tool

In our first set of questions, we are interested in understanding the process you went through to [*select, modify, or develop*] the *[assessment tool]*, such as the factors you needed to consider (for example, purpose, users, process).

1. For what purposes was the assessment tool selected or developed in your state?

   (If needed, probe for whether the intended purpose of the assessment tool is for self-assessment, improvement, accountability, or implementation fidelity. Also probe if the assessment tool is intended to support special education designation based on data-based decisionmaking, or evidence-based programs for the general education population.)

2. What factors served as an impetus for having an assessment tool?

   (If needed, probe for factors including state guidelines, an advisory board, program evaluation, concerns about districts and schools not implementing RTI with fidelity, or districts and schools seeking guidance about RTI implementation.)

[6] Interviewers will use the term "RTI" or "MTSS" depending on the terminology used by the state.

3. Was the assessment tool selected from an existing assessment tool?

   ☐ Yes {Go to Q3a, and skip Q3b}

   ☐ No {Go to Q3b}

   a. If yes, was the assessment tool adapted?

      i. How was the assessment tool modified?

      ii. Why was it necessary to modify the assessment tool?

      iii. How many years has the state been using this assessment tool?

   b. If no, what resources did the state use to develop the assessment tool?

      i. Why did the state choose to develop a new measure?

      ii. Did the state receive support from outside experts? If yes, how did they support the development work?

      iii. How many years has the state been using this assessment tool?

4. What factors did the state consider when developing, adapting, or selecting an assessment tool?

   (First let the respondent answer without any prompts. Then ask 4a–4c if these topics were not mentioned.)

   a. Was burden on district or school staff a consideration in developing/selecting the assessment tool (for example, number of items, time commitment)?

   b. Was alignment with the state's MTSS/RTI recommended practices a consideration in developing/selecting the assessment tool?

   c. Was technology a consideration in selecting the assessment tool?

      i. If yes, how?

✪ Is there a document that summarizes the selection (or development) process? If yes, could you share a copy?

5. How did the state decide on what key MTSS/RTI practices are represented in the assessment tool?

   a. How does your state define "evidence-based" interventions?

   b. How is this definition applied to the selection of programs and practices?

   c. What type of evidence is required to provide ratings or scores on the assessment tool (for example, direct observation; collection of interventionist's data; coaches' records; teacher self-report)?

6. How did the state decide on the type of rating scale?

    a. What types of fidelity thresholds have been established, if any?

    [If fidelity thresholds have NOT been established, skip to Q6c.]

    b. How were fidelity thresholds established?

    [Skip to Q7.]

    c. *[If thresholds have not been established]* Why haven't fidelity thresholds been established?

    (Probe for factors like insufficient evidence, lack of technical skill.)

7. Was the assessment tool pilot- or field-tested?

    ☐ Yes {Go to Q7a and skip Q7e}

    ☐ No {Go to Q7e}

    a. Can you briefly describe the process?

    b. What did you learn from the results?

    c. Were the results used to modify the content or procedures of the assessment tool? If yes, how so?

    d. How was the pilot or field test supported (for example, hired a contractor, schools and/or teachers received stipends, release time)?

    e. Why is information about pilot testing not available (is it because of cost, time, expertise)?

✪ Is there a copy of the pilot and/or field test findings you could share with us?

8. ***[IF information about the assessment tool's technical properties exists based on the website/document review summary sheet and verification process. If this information is not available, skip to Q9.]*** We located some information about reliability and validity and have a few questions to help us understand the process.

    a. What information does the state have on the assessment tool's inter-rater reliability (or inter-rater agreement) across administrators?

    b. What information does the state have on the construct validity of the domains?

    c. What information does the state have on the face validity of the items on the measure?

✪ Is there a copy of how (any of) these technical properties of the measure were reported that you could share with us?

✪ Are there updated documents with this information available you could share with us?

[Then skip to Q10.]

9. ***[IF information about the assessment tool's technical properties does <u>not</u> exist based on the website/document review summary sheet and verification process.]*** Why is information about the assessment tool's reliability and validity not available (is it because of cost, time, expertise)?

10. What were the biggest challenges with selecting or developing an assessment tool to measure RTI implementation?

Description of how states use the assessment tool

We'd also like to learn about how your state supports districts and or schools in using the assessment tool to measure MTSS/RTI implementation.

11. Are all the *[districts or schools]* in the state using the assessment tool?
    a. If not, how do *[districts or schools]* opt out of administering the assessment tool?
    b. How much autonomy do districts have in modifying or adapting the assessment tool?
12. How did the state roll out the assessment tool for use by [name the intended user based on the document review]?
    a. What was the outcome from this approach?
    b. How did the state follow up with [districts, schools] after the initial rollout?
    c. What would the state retain about this approach?
    d. What would the state change about this approach?
    e. What challenges did the state face with this approach?
13. Why did the state decide to train [type of personnel identified from website/document review and verification process]? Were other types of personnel considered for training, and if so, why were they not included?

    [Note – You are not asking for the names of specific individuals, but rather types of personnel (for example, district administrator, school administrator, regional trainer).]
14. After the initial rollout, how did the state provide support for continued use of the assessment tool?
    a. How effective does the state think the training is for supporting end users?
    b. If continued support is not provided, why not (for example, cost, time)?
15. How has your state supported districts and schools to use the assessment tool?
    a. Has the state used existing in-state professional development networks? Trainer of trainer models? Pilot sites that serve as models to showcase?
16. Is the training/support offered the same for all schools and districts statewide or is it school or district specific?
    a. If different, how do they differ and who tailors them?
    b. Can you provide an example of tailored support?

We'd like to understand how the state uses this information from the administration of the MTSS/RTI implementation assessment tool.

17. Who receives the results from the administration of the MTSS/RTI implementation assessment tool?
18. Does the state specify how the findings from the administration of the assessment tool should be shared? And with whom?
19. How are the results reported or displayed (for example, report on a data dashboard)?
    a. Is there an example to share?

20. What are the next steps after findings/results are shared (for example, create an action plan for the school or district, target professional development for many or for a few, shape policy or changes to the MTSS/RTI approach)?
    a. Is there an example to share?
21. What are the benefits and challenges of using the data collected from the assessment tool (for example, challenges in interpreting the data to know what to do next)?
22. Has your state used the assessment tool to evaluate implementation of the state's RTI or MTSS framework? Or are you currently evaluating implementation of the RTI or MTSS framework?
    a. If yes, in what year?
    b. Are there specific districts that have used the assessment tool for evaluation purposes? If yes, which specific districts?

✪ If yes, is the report available that you would be able to share?

Lessons learned and recommendations

This is our final set of questions! We'd like you to reflect on how your state has supported districts and schools to administer the assessment tool for measuring MTSS/RTI implementation and to use the data collected from the assessment tool.

23. Are there lessons learned or recommendations you can share with other states about the selection, implementation, and use of the assessment tool for measuring implementation of MTSS/RTI?
24. Are there any districts in your state that may serve as exemplars for how to effectively collect and use the data from the assessment tool to improve MTSS/RTI implementation?
25. Has your state transitioned from using an RTI to an MTSS framework?
    a. If yes, did this have implications for changing the tool? If yes, how so?
        i. What process was involved?
        ii. What were the opportunities?
        iii. What were the challenges?

Thank you for your time and thoughtful responses.

Appendix D. Summary of supporting analysis documents

Supporting analysis documents include profiles of the tools used in the eight states selected for interviews (table D1); images of a rubric and a rating scale (figures D1 and D2); examples of tool types by level of implementation (figures D3–D6); a description of what tools are designed to address, if they request respondents to provide evidence to justify ratings, and how these vary by tool type (table D2); and the proportion of key multi-tiered system of supports/response to intervention (MTSS/RTI) practices addressed by each tool type (table D3).

Table D1. Profiles of tools used in the eight states selected for interviews

Florida	
Tool details	Profile
Name	• Self-Assessment of MTSS Implementation (SAM Version 2.0, October 2015)
Description	• The SAM is a rubric intended to assess current implementation levels of a multi-tiered system of supports (MTSS) model. The Florida Problem Solving/Response to Intervention (PS/RtI) and Positive Behavior Intervention and Supports (PBIS) projects developed the tool in 2013 and modified it in 2015. • The SAM is intended to be administered at the school level in grades K–12 and addresses academic, behavior, and social-emotional supports. • The SAM also includes items that assess processes and activities that facilitate MTSS implementation (for example, leadership and capacity building).
Intended administrators	• School-Based Leadership Teams (SBLT) complete the SAM. SBLTs are composed of six to eight staff members who have a leadership role in facilitating MTSS implementation at their school and should include representatives from administration, general education, special education, student services, and content specialists. • SBLT members individually complete the SAM, and then a facilitator supports the team in reaching consensus on a score for each item.
Recommended frequency of administration	• The SAM is intended to be administered once a year.
Intended users and recipients of data	• The SBLTs review the the school-level results. District-Based Leadership Teams (DBLTs) review district-level results and the results of individual schools. SBLT and DBLT members may find it helpful to work with a coach or facilitator who can support data interpretation and are encouraged to share the data with instructional staff members. • The Florida PS/RtI project staff receive the data for schools they work with for analysis and reporting.
Use	• SBLTs should review their data from the SAM to determine strengths and steps needed to build their MTSS system. The Florida PS/RtI project provides a template schools may use to guide them through this process. The goal is for schools to use the data and tool as part of their school improvement process and to support action planning.
Rationale for development	• Educators had difficulty understanding how to complete multiple implementation assessments across the different content areas (RTI, PBIS, and mental health), and there was some pressure to integrate the tools and systems. The Florida PS/RtI and PBIS projects also wanted to be proactive in developing a tool that districts and schools would have confidence in if the tool were ever to be compulsory. • Because of the movement toward integrating tools and systems and the potential for use of the tool to become compulsory, and because no existing tool looked at the system in an integrated way, the PS/RtI and PBIS projects developed a new tool.

Florida	
Tool details	Profile
Development approach	• The tool was co-developed by a five-member team from the Florida PS/RtI project and the state's PBIS project, which are both funded through federal special education flow-through dollars. The team solicited feedback from other staff, including the leaders and staff who provide direct technical assistance and training. • The team reviewed the literature and consulted with colleagues to determine domains and indicators. An expert review panel of 11 district-, state-, and national-level experts on MTSS and PBIS implementation reviewed the draft tool and provided feedback using a structured process of rating items for relevance and clarity. Using qualitative feedback from reviewers, the team revised items for which the expert panel lacked agreement on relevance and clarity. • The team conducted cognitive interviews with typical representatives from SBLTs to assess the extent to which the target audience interpreted the items consistent with their intended meaning. Team members took notes and used the information to clarify terms or items. • The projects conducted small- and large-scale pilots to collect information about technical adequacy, usability, and feasibility. Florida conducted a small-scale pilot (100 schools) to inform revisions and a large-scale pilot (400–500 schools) to look at the properties of the instrument.
Training and coaching on how to use the tool	• Schools may volunteer to work with the PS/RtI project team, but doing so is not required. Regional project coordinators oversee administration of training to individuals for facilitating SAM completion. The team decided to train facilitators because it is a team-based assessment and having a facilitator can help guide the consensus-building process. • Support is tailored to each district and school. Some districts have built their own internal capacity for training, which is a goal of the PS/RtI project. • Each year, the PS/RtI project team sends districts they have worked with a link to an online database in which school teams enter their ratings. Project staff work with district contacts to monitor completion of the tool and to make school-level charts and action plan templates to help schools with decisionmaking.
Challenges, recommendations, and lessons	• The PS/RtI project acknowledged that, like Florida, projects or states developing tools may wrestle with the tension of fidelity and variability and how to determine acceptable levels of both. The approach to this challenge will determine the type of tool to be used, how to communicate the purpose of the tool, and what trainings to offer. • Because of the complexity of MTSS, it can be challenging for districts and schools to figure out where to start in using the SAM data. In some cases, it can take years to improve on a single component in MTSS. If MTSS is not part of a larger system, it can be difficult for districts to make changes. • States may have difficulty developing an integrated tool that includes both academic and behavioral interventions. It is easy conceptually but can be difficult technically when perspectives and expertise vary. The benefits of having staff from the RTI and PBIS state-funded technical assistance projects working together, however, outweighed the difficulty, with the projects noting that the collaboration resulted in common terminology and paved the way for similar collaboration at the district level. • The Florida projects recommend embedding the tool as part of the overall approach of implementation, making it clear how data from the tool support implementation and providing districts with coaching or technical assistance to use the data for decisionmaking.

Kansas	
Tool details	Profile
Name	• Checklist for Implementation Readiness (2015) • Process Implementation Tool (2017) • Integrated MTSS Implementation Scale—Administrators (2017) • Integrated MTSS Implementation Scale—Instructional Staff (2017)
Description	• The Checklist for Implementation Readiness and the Process Implementation Tool (also referred to as the "checklists") examine whether structures and decisions are in place to promote successful implementation of a multi-tiered system of supports (MTSS) in grades preK–12. Kansas's Innovation Configuration Matrix (ICM) describes the principles and practices of the state's MTSS framework (Kansas MTSS and Alignment) and is intended to be used as a companion document with the state's implementation checklists. • The Integrated MTSS Implementation Scales (also referred to as "implementation surveys") are self-assessments of individual implementation and perceptions of school and district implementation of Kansas MTSS and Alignment. Data are verified by MTSS state trainers through facilitated District Implementation Team data analysis meetings. • The checklists and original implementation survey (the School Implementation Scale) were developed in 2009, with revisions to the checklists in 2015; revisions to the implementation survey in 2015 and 2016, creating separate items for administrators and instructional staff; and new implementation surveys, adapted from the revised 2016 surveys, developed in 2017.
Intended administrators	• District and school leadership teams are trained in administering and using the data from these tools. In some smaller districts, all staff may attend the Kansas MTSS and Alignment trainings and be trained in using these tools, regardless of their leadership team status.
Recommended frequency of administration	• The checklists are used in an ongoing manner for districts working through the process. • The implementation scales are administered once a year.
Intended users and recipients of data	• Administrators, instructional staff, and Kansas MTSS and Alignment state staff are expected to use the data generated by the tool.
Use	• The Checklist for Implementation Readiness is a readiness-for-implementation assessment, a way to monitor implementation of Kansas MTSS and Alignment components and identify additional training and support needs. • The Process Implementation Tool is used to ensure that structures are in place and are being used as intended. • The implementation scales are used to support decisionmaking at the school and district levels and to inform customized coaching.
Rationale for development	• Kansas developed the Checklist for Implementation Readiness and the Process Implementation Tool to help schools and districts put in place structures and processes for sustained implementation. Kansas developed the Process Implementation Tool to help schools and districts attain fidelity to processes and practices, including data-based decisionmaking. • Kansas adapted the implementation scales to support consistent implementation across districts and understanding and implementation of key Kansas MTSS and Alignment elements.

Kansas	
Tool details	Profile
Development approach	• Kansas developed and adapted its tools using funding from Grant Title VI Part B of the Individuals with Disabilities Education Act. A team of state educators and national experts in various content areas developed the ICM, which is meant to support use of the tools. • Kansas adapted the implementation scales from an existing survey by Erickson, Noonan, and Jensen (2012). National experts and local educators from a university research group assisted with the wording and validation of the surveys. District administrators also provided feedback on the surveys. • The Kansas MTSS and Alignment team and trainers developed the Checklist for Implementation Readiness and Process Implementation Tool. • The evaluation team led pilot testing with the checklists and surveys in 2015. The checklists were piloted by state trainers with school districts in training. The implementation surveys were piloted with districts participating in implementation professional development. • The evaluation team and the Kansas MTSS and Alignment project collaborated on revisions to the checklists and implementation surveys. This included adjusting, adding, and removing items on the checklists and modifying items on the survey scales to reduce subjectivity and promote consistency across respondents. Focus groups with school leadership were conducted to determine accuracy and usefulness of the data for decisionmaking.
Training and coaching on how to use the tool	• The state uses its existing training network, specifically the Kansas MTSS and Alignment project, to provide training on implementation assessment tools. • Districts must apply to participate in training, which includes paperwork and onsite interviews. • Training generally includes 12–15 days of training for the building leadership teams; ongoing in-district coaching during structuring, installation, and implementation; and 6–8 days of training on how to use the data during initial implementation. • The tools and training around the tools are used only in schools and districts that are active in Kansas MTSS and Alignment implementation training or sustaining implementation. The training content is consistent across all schools and districts. It is tailored to the specific needs of the districts (for example, how to set up the online survey system to allow reporting of data at all appropriate levels). • To build capacity in districts, the Kansas MTSS and Alignment team trains district coaches in all the processes, so they can be in the buildings daily to coach staff and onboard new staff. • Schools do not use the tools on their own without guidance from a state coach for three to four years.
Challenges, recommendations, and lessons	• District-level trainings were challenging because districts had difficulty committing the time to doing the professional development. This was part of the reason the application process was put in place; the state can assess districts' readiness and prepare them for what will take place during training and implementation. • Kansas notes that tool development takes time to make it consistent with the model, while also providing actionable information. • Kansas notes that districts and schools have questions about their data and a need to look at their data in different ways. Users of the data can be overwhelmed by too much data, so there is a need to provide the information in the most concise manner possible.

North Carolina	
Tool details	Profile
Name	• North Carolina Self-Assessment of MTSS (NC SAM) (2015)
Description	• The NC SAM is an adapted version of Florida's Self-Assessment of MTSS (FL SAM). • This rubric is intended to be an implementation fidelity tool. • The tool is administered in grades preK–12 at the school level for academics, behavior, and social-emotional development.
Intended administrators	• The district MTSS (multi-tiered system of supports) coordinator or member of the MTSS District team facilitates the administration of the tool with a school team. Each member of the school team reviews the items on the NC SAM independently before team members discuss their scores together to reach agreement on what answer best represents the current status of implementation at their school. • The school team proposes a score and provides evidence, which is reviewed by the district facilitator. North Carolina decided to require the use of an external facilitator to increase the tool's validity.
Recommended frequency of administration	• The NC SAM is administered once a year during April through June.
Intended users and recipients of data	• The school team and the district use the data to identify and prioritize next steps in implementation. • The state receives the data when schools and districts use the online application to score their assessments.
Use	• The NC SAM is used for continuous improvement at the school and district levels. • The state also uses the data for evaluation, with the goal of developing its own universal screening and progress monitoring tools and eventually linking implementation data to student outcome data. • North Carolina uses a web-based program to generate scores from the tool that are then shared with the schools and the state. The NC SAM produces two scores for each domain: a percentage of implementation and an implementation level (not implementing, initially implementing, or fully implementing). • North Carolina tied items from the NC SAM to its school improvement planning software to help it use the NC SAM data to plan for school improvement.
Rationale for development	• North Carolina adapted the FL SAM to better align it with its needs. North Carolina wanted to move it from a self-assessment to a facilitated tool; add suggested supporting evidence for every item to make the tool more robust; add score levels; and divide content areas into separate items (such as academics, behavior, social-emotional), which were combined in single items in the FL SAM.
Development approach	• North Carolina conducted a standard-setting project for use of the adapted FL SAM in the state. Education professionals, implementers of the NC SAM, and school education agency personnel reviewed the tool to ensure consistency of language with North Carolina's MTSS model and to define implementation levels. • North Carolina developed fidelity thresholds by asking stakeholders in the validation project to identify critical items (based in current or future policy). The stakeholders determined what scores must be received to be considered initially or fully implementing. Other adaptations include the addition of supporting evidence for each item and the requirement that the tool be facilitated by an outside person from the district's central office. • There was no formal pilot testing, but North Carolina solicited feedback from the field. On the basis of feedback, the state is developing its own technical manual. A goal of the state is to integrate the NC SAM with implementation of the Tiered Fidelity Inventory (TFI) for Positive Behavioral Interventions and Supports (PBIS) and to release the manual once the two tools are combined and validated.

North Carolina	
Tool details	Profile
Training and coaching on how to use the tool	• The NC SAM was introduced in 2015 and is intended to be fully implemented by 2020. North Carolina introduced the tool using a cohort model for professional development in which local education agencies are grouped and training is staggered. The first cohort was selected according to the results of a 2014 survey assessing readiness to implement initiatives based on implementation science. Many of the districts in the first cohort already had some key components in place and other characteristics that made them ideal candidates, such as PBIS implementation fidelity and lower-than-state-average number of students with disabilities. Cohort 2 was a mixture of most ready and least ready; cohorts 3 and 4 were the remaining school districts; and cohort 5 consisted of charter schools. • District MTSS coordinators (who may also be directors of curriculum and instruction, assistant superintendents, or special education directors) receive the training. The tool was initially rolled out to coordinators through face-to-face training, online videos, technology supports, guidance documents, and individual modeling with some sites. The state follows up with districts, including through meetings with coordinators and annual retraining on the instrument.
Challenges, recommendations, and lessons	• North Carolina notes that the challenges were associated not with selecting or adapting the tool but with implementing it. The district MTSS coordinators are trained, but the transfer of knowledge from district to school was difficult. • One challenge reported in the field is having to administer two different assessments—the NC SAM and the TFI for PBIS Implementation. The finding that completing two tools has been a burden on the schools has prompted the state to work on combining the NC SAM with the TFI for PBIS.

Oregon	
Tool details	Profile
Name	• Oregon Response to Instruction and Intervention (ORTIi) District Implementation Evaluation Tool–School Based form (DIET-SB2) is the primary tool for assessing response to intervention (RTI) implementation (2015). • Oregon also uses the following supplementary documents to support RTI implementation: - ORTIi District Implementation Evaluation Tool–District Based (DIET-DB2), which is adapted from the District Capacity Assessment from the National Implementation Research Network. It is not necessarily specific to RTI or multi-tiered system of supports (MTSS) implementation but is used to assess district capacity for any initiative or innovation. - ORTIi Installation Matrix, used as a coaching tool, is a descriptive document that outlines the steps necessary for effective implementation. It is used by ORTIi coaches with district leadership teams to qualitatively track progress implementing essential RTI components over time. However, it is not considered a formal, quantitative assessment tool because users do not provide ratings or scores.
Description	• The DIET-SB2 is used to assess the extent of implementation. It includes three parts: ◦ A 30–60 minute interview/questionnaire with the school principal and literacy specialist. ◦ A review of evidence, including the RTI manual handbook, student data systems, and completed meeting agendas. ◦ An anonymous 5–10 minute online staff survey. • The DIET-SB2 was initiated in 2010, with the current version (2) released in 2015. It is intended to be used with elementary schools in the area of literacy.
Intended administrators	• An implementation coach from the ORTIi Center completes the tool. The evidence review portion is completed either during the onsite visit or following the visit. • Trained district personnel may complete the tool as a self-assessment if the district has had three or more years of support from ORTIi and has received training in administering the tool.
Recommended frequency of administration	• The tool is recommended to be administered once a year, in the spring.
Intended users and recipients of data	• The Building Leadership Teams and District Leadership Teams are the intended users of the data. ORTIi Center coaches also have access to the results. • Data from the tool are accessible using ORTIi's Assessment System for Implementation Support data dashboard, which provides data visualizations for the essential components. The dashboard provides a district's or school's percentage on a given dimension, allows the user to compare data across schools, discover strengths and areas needing improvement, and learn about resources for items needing improvement.
Use	• The DIET-SB2 tool is intended to monitor the extent of implementation and fidelity and to make decisions on implementation and resource allocation. • The tool is intended to be used with the ORTIi Installation Matrix, a coaching tool to explain what implementation should look like at different stages of implementation. • ORTIi coaches meet with District and Building Leadership Teams in the spring of each year and use data from the DIET-SB2, along with student outcome data, to evaluate implementation efforts and create action plans.
Rationale for development	• When ORTIi first developed the tool, there were no available tools that aligned with the state's RTI system. ORTIi wanted to be proactive in enhancing implementation of its RTI framework and wanted a tool that was linked to its implementation components and that could provide actionable feedback to the schools and districts implementing RTI.

Oregon	
Tool details	Profile
Development approach	• The ORTIi Center developed the DIET-SB2. The center is funded by the Oregon Department of Education. Funding for the project comes primarily through the Individuals with Disabilities Education Act. • ORTIi Center staff conducted most of the work to develop the tool, though they did solicit informal feedback from the University of Oregon's Center for Teaching and Learning and Education and Community Supports. • The DIET-SB2's staff survey component was adapted from the staff survey used by the Oregon Department of Education with its State Personnel Development Grant schools (Erickson et al., 2012). The center consulted with the authors on the adaptation of the survey. • The ORTIi Center conducted a pilot with the DIET-SB2 in 2013/14 with six districts to obtain feedback from users (including coaches) on content, experience, and utility of information gathered. As a result, center staff deleted some items, adjusted the scoring rubric and components, and rearranged the grouping of items. Center staff also adjusted specific components on the instrument.
Training and coaching on how to use the tool	• Districts apply to be part of the ORTIi initiative, and participants are trained to use the tools. Districts that are not working with ORTIi can technically use the tool but might have difficulty because there are no additional training modules available. • Districts working with ORTIi receive training, coaching, and technical assistance with RTI implementation. After the initial training and coaching sequence is complete, districts are invited to continue participation in trainings. • Originally, ORTIi would work with each district for five years; now it is four years for elementary literacy, three years for middle school literacy, and two years for elementary math. Districts are required to complete the elementary literacy sequence before the middle school literacy or elementary math sequence.
Challenges, recommendations, and lessons	• Oregon identified issues with capacity for training. Although the DIET-SB2 can be used independently, there is lack of training and capacity for districts that want to use it on their own. Once districts are out of the project, ORTIi no longer has the capacity to provide direct coaching or technical assistance.

Pennsylvania	
Tool details	Profile
Name	• Using Response to Intervention (RtI) for Specific Learning Disability (SLD) Determination: School Building Application (K–12) for Approval (2017) • Pennsylvania also uses the following supplementary documents: ◦ Using Response to Intervention for SLD Determination: Renewal Re-Approval Application. Schools using assurances that have already been approved can complete this abbreviated form of the application. ◦ MTSS Fidelity of Implementation Tool–Enhancing RTI. This is a companion document that schools may use as a guide when evaluating their current evidence relative to what Pennsylvania considers to be evidence of fidelity of MTSS implementation and sustainability prior to using RTI for SLD determination.
Description	• The tool is a 20-item application for using RTI for SLD determination in reading, writing, and math. • Schools submit an application, which includes evidence for each item, to the Bureau of Special Education (BSE). The BSE reviews the application to determine approval. • Schools use a shorter version of the tool when seeking reapproval for using RTI for SLD determination.
Intended administrators	• Building teams complete the tool and are encouraged to partner with regional consultants during the completion process. Intermediate Unit consultants come onsite to review the application prior to submission. • The following building team members are required to complete the tool: superintendent, building administrator, director of special education/supervisor, and school psychologist.
Recommended frequency of administration	• Schools completing the tool as their application to use RTI for SLD determination complete the full tool once at the beginning of the school year (in September). • Schools complete a shortened version of the tool once every five years to renew their approval to use RTI for SLD determination, though the expectation is that schools will continue to use the tool once approved.
Intended users and recipients of data	• BSE reviews the evidence that schools submit with the tool as part of the application. They provide recommendations for training and technical assistance in specific areas based on their review.
Use	• The tool's purpose is multifaceted. Its primary purpose is as the application for a school to use RTI for SLD determination. It is expected that the tool will continue to be used after approval. • Schools may also use the tool as a needs assessment or a fidelity of implementation assessment. • Schools can use an optional companion tool, MTSS Fidelity of Implementation Tool: Enhancing RTI, to help them determine whether the evidence gathered for the application meets Pennsylvania's standard of fidelity of MTSS implementation and sustainability.
Rationale for development	• Pennsylvania developed the tool after the 2004 reauthorization of the Individuals with Disabilities Education Act stating that states cannot require schools to use the ability achievement discrepancy to identify children with specific learning disabilities. • At the time of development, no tools existed that met Pennsylvania's needs; existing measures were too broad for identifying schools that may use RTI for special education identification.

Pennsylvania	
Tool details	Profile
Development approach	• Pennsylvania has revised the application several times since its inception in 2010, with the most recent version released in 2017. A three-person team developed the original application. Intermediate Unit consultants and representatives from the Pennsylvania Training and Technical Assistance Network (PaTTAN) also supported the tool's development. Early revisions included requiring schools to provide evidence that elements of the tool are in place. Evidence can be physical evidence or narrative text. • University consultants and existing resources, particularly those with a focus on research and screening, informed the tool's development. Pennsylvania also solicited feedback from cross-disciplinary practitioners, including administrators, to further refine the tool. • Pennsylvania informally piloted the initial tool with cross-disciplinary practitioners. Selection of sites for feedback was based on a survey indicating that the sites were implementing MTSS. Feedback from the field was that the tool, which had 42 items, was too long and resulted in long applications (approximately 250 pages). Reviewers identified items that were redundant and could be removed. The tool was ultimately shortened to its current 20-item version.
Training and coaching on how to use the tool	• MTSS consultants working at the Intermediate Units are trained on the use of the tool. Schools can learn about the tool through sessions hosted by PaTTAN or their local Intermediate Units. Schools interested in using the tool can find support through their Intermediate Units at any time. • MTSS consultants conduct professional development and site visits to support schools through the application process. If a school's application is not approved, the BSE will recommend professional development and technical assistance that aligns with the school's needs.
Challenges, recommendations, and lessons	• Pennsylvania reported a general challenge in getting educators to move toward using an MTSS framework. The difficulty lies in how to create a tool that both motivates people to move in the direction of MTSS while also serving as a fidelity of implementation tool. With regard to the tool itself, it is still seen by some as cumbersome, even in its current, pared form. • Pennsylvania recommends that other states rely on best practices around MTSS (for example, screening, data-based decisionmaking, content-based research) for developing and implementing an MTSS tool and for tools to require evidence. • The state reported that the list of schools approved by the BSE is small, and no kindergarten through grade 12 schools have been approved.

Vermont	
Tool details	Profile
Name	• Vermont Multi-tiered System of Supports Response to Intervention and Instruction (MTSS-RtII) Self-Assessment 1.0 (SAT 1.0) (2014)
Description	• Vermont released the SAT1.0 in 2014. • The SAT1.0 was intended to support Supervisory Unions/Districts (SU/SD) as a readiness tool and implementation check of the MTSS Field Guide 1.0 (FG1.0). • SU/SD leadership teams sometimes used this tool with schools within its organization to assess where each school stands in regard to the larger system. • Vermont used a Data2Action tool aligned with FG1.0. This tool uses a plan-do-study-act improvement science cycle approach to support educators in using data to inform and improve practice (2014).
Intended administrators	• The SAT1.0 is designed to be completed collaboratively by SU/SD/school leadership teams. • Required members are administrators, classroom teachers, special educators, reading and math specialists, and, when appropriate, curriculum specialists, assessment coordinators, school counselors, and behavior specialists or positive behavioral interventions and supports (PBIS) coordinators. • At least one administrator should be knowledgeable about FG1.0 to facilitate the SAT1.0 process.
Recommended frequency of administration	• The SAT1.0 is recommended to be administered annually by SU/SD/school leadership teams.
Intended users and recipients of data	• SU/SD/school leadership teams are the users of this tool. • The data are shared with administration and staff to inform the Comprehensive Needs Assessment of their Continuous Improvement Plan (CIP).
Use	• The purpose of this tool is to support SU/SD/school leadership teams to adopt, develop, or maintain a multi-tiered system of supports (MTSS) designed to improve instruction and intervention for all students in the areas of behavior and social-emotional and academic learning. • The SAT1.0 is used to support leadership teams in reflecting on each component of the Field Guide to identify areas of strength and need. • Teams identify initiatives in place that can support implementation, prioritize areas, identify concerns to be addressed in action planning, and determine next steps. • Teams use an iterative process to perform these tasks.
Rationale for development	• The SAT1.0 was developed to support supervisory unions, districts, and schools in determining readiness and fidelity of implementation of the FG1.0. • The SAT1.0 was created to reflect the five components of an MTSS in Vermont. • The SAT1.0 contains a list of characteristics for each of the five components of the FG1.0 for SU/SD/school leadership teams to judge where their SU/SD/school stands on each characteristic.
Development approach	• In 2012 Vermont contracted with the Vermont Reads Institute (VRI) to create the FG1.0 and SAT1.0. • VRI collaborated with the Vermont Statewide Steering Committee for RTI, which included stakeholders from the Vermont Agency of Education; educators from elementary, middle, and high schools; and consultants on guidelines development. • Vermont also used a consultant with background in implementation science, as well as external systems coaches, to help schools with their tools. • The State Personnel Development Grant (SPDG) team contracted with a consultant working with Michigan's Integrated Behavior and Learning Support Initiative. • Vermont piloted the FG1.0 and SAT1.0 with SPDG schools. External system coaches used the pilot results as part of the evaluation requirements of the SPDG. • The SAT1.0 was not tested technically for validity or reliability metrics.

Vermont	
Tool details	Profile
Training and coaching on how to use the tool	• When the SAT1.0 was initially developed, Vermont provided regional presentations on the tools and FG1.0. • The state launched a pilot program in 2014, which was funded using SPDG money. • External systems coaches were provided only to the SPDG schools, though MTSS training was available to all schools in the state. • During the pilot, coaches facilitated conversations on use of the FG1.0 and SAT1.0. • Vermont followed up with schools participating in the SPDG grant during the grant period. However, now that the grant has ended, there is no longer any follow-up for trained schools. • Vermont offered MTSS implementation training as part of a week-long summer institute.
Challenges, recommendations, and lessons	• Vermont experienced funding and capacity constraints that limited what was offered to schools. • After the SPDG grant ended in 2017, Vermont was no longer able to fund external systems coaches used during the SPDG. • Vermont created a dedicated team to support implementation of MTSS (2016). • Vermont recognized the need to revise its FG and SAT since its adoption in 2014. • Through annual MTSS survey data, schools indicated a continuing need for supports in their systemic and comprehensive approach and in high-quality instruction and intervention, two of the five components of Vermont's MTSS framework. • Vermont contracted with a vendor to create FG2.0 and SAT2.0. • Vermont learned that it is imperative to show connections between the FG2.0 and other state documents used to support SU/SD/school leadership teams (for example, CIP). • Beginning in 2019 the Vermont MTSS team started to provide technical assistance and professional learning to support the use of these revised tools.

Wisconsin	
Tool details	Profile
Name	• Schoolwide Implementation Review (SIR) (2015) • RtI All Staff Perception Survey (All Staff) (2016)
Description	• The SIR is a self-assessment rating scale intended to assess implementation of Wisconsin's response to intervention (RtI) framework in schools. The SIR was developed in 2011 and updated in 2015. • The All Staff is a supplemental survey that assesses staff ratings on infrastructure, initial implementation, or full implementation against the ideal RtI practice in the school and can be compared to the leadership team's ratings on the SIR. • The tools are designed to be administered at the school level (grade levels not specified) and are intended to be completed from a reading or math perspective.
Intended administrators	• The leadership team, which completes the SIR, includes at least three people, one of whom is a building administrator and the others are a cross-section of staff (for example, principal, general educators, special educators, student services staff, and content or service experts). • The leadership team determines who receives the All Staff survey. The Wisconsin RtI Center's guidance is that all adults who work with students in the building take the All Staff survey.
Recommended frequency of administration	• The SIR is recommended to be taken annually. • The All Staff survey is recommended to be taken annually.
Intended users and recipients of data	• All levels of the education system receive the results of the SIR. The Wisconsin RtI Center reports to the Wisconsin Department of Public Instruction, in aggregate, the impact of the work of the Wisconsin RtI Center and schools' progress toward implementation of Wisconsin's RtI vision. Subscale and item-level results are used to facilitate professional development plans at the regional and state levels.
Use	• Districts and schools use the data from both the SIR and the All Staff survey to plan actions for improvement around subscale scores or specific items from the scale to determine progress toward full implementation. • Assessment results are used to determine training frequency and location and the impact of turnover. • The Wisconsin RtI Center also uses the results to revise and validate the instruments over time.
Rationale for development	• Wisconsin chose to develop the SIR because no tools were available to adequately assess RtI at the systems level when the state initiated its work in 2010. Districts and schools were posing questions to the state on how to establish an infrastructure for RtI and how to improve their understanding of Wisconsin's RtI framework and related practices.

Wisconsin	
Tool details	Profile
Development approach	• Wisconsin used federal special education discretionary grant dollars to create the Wisconsin RtI Center, which was tasked with ensuring RtI implementation and creating tools to support RtI implementation. • To develop the tools, the Wisconsin RtI Center drew on expertise from the National Implementation Research Network, the national Positive Behavioral Interventions and Supports (PBIS) Technical Assistance Center, and American Institutes for Research consultants from the National Center on Response to Intervention. • The All Staff survey was modeled after a tool from the PBIS National Technical Assistance Center-Benchmarks of Quality and the Schoolwide Assessment Survey. • The Wisconsin RtI Center also received assistance from a doctoral candidate and an evaluation coordinator to examine technical properties of the SIR, which has been reported to have high internal consistency, internal validity, and convergent validity. • The Wisconsin RtI Center's Regional Technical Assistance Coordinators facilitated the piloting of the tools. The SIR was piloted in 2011 with 24 schools—11 schools engaged in focus groups on the SIR (spring 2011), and 13 schools completed the SIR and provided feedback in an Excel form (fall 2011). Wisconsin made updates to the tool in fall 2011, including changes to language and scoring, before it was placed online for use. On the basis of feedback during the pilot, the Wisconsin RtI Center also created an FAQ document and a webinar on how to take the SIR. Wisconsin piloted the All Staff survey with a subset of the schools that received the SIR.

Training and coaching on how to use the tool	• The state recommends that school teams take the SIR as part of the Wisconsin RtI Center's Framework Training. The Center offers two options for helping schools develop background knowledge to take the SIR:
	  ◦ A two-day Wisconsin RtI Center foundational training held throughout the school year and across the state (recommended). The state trains its academic Regional Technical Assistance Coordinators to train school teams on the SIR, and Cooperative Educational Service Agency consultants to support school teams in taking the SIR. This mode of training was selected to standardize trainings and create fidelity to the model.
	  ○ Alternatively, schools can participate in an online module about completing the SIR, available on the Wisconsin RtI Center website (recommended as a refresher or for new team members).
	• School trainings are advertised through the Wisconsin RtI Center website, newsletters, and social media and are held regionally about five times a year with 50–60 people at each training.
	• The Wisconsin RtI Center continues to offer support for schools following trainings through refresher and booster trainings, networking meetings, communities of practice, virtual and onsite technical assistance, email support, and periodic reminders to take the SIR.
	• Wisconsin RtI Center uses a recognition program that encourages tool use because the state does not require it. Schools are recognized for their implementation progress at conferences, through press releases, as an example in the annual report, and with seals on emails.

Challenges, recommendations, and lessons	• Wisconsin found it challenging to define and assess RtI at the same time. Because of the concurrent introduction of RtI to the state and the roll-out of the SIR, schools were learning about RtI at the same time they were learning how to assess its implementation. • Wisconsin found it difficult to develop the tool when there were few examples and lessons to be learned from other states that had engaged in a similar development process. Similarly, the state found it difficult to develop the tool when its definition of RtI was broader than that in the national conversation at the time. • The state suggests that, given the wide availability of tools today, states consider adopting or adapting existing tools before developing their own. Wisconsin suggests that, when implementing a tool, a state should be clear on how data will be used and maintained and should know its logic model or end goal.

Wyoming	
Tool details	Profile
Name	• MTSS Implementation Checklist for Literacy (Literacy Checklist; 2016) • Wyoming also uses the National Center on Response to Intervention's Essential Components of RTI Integrity Rubric and Worksheet (NCRTI Rubric) without modification (2014). However, the state changed the name of the tool to be the Wyoming MTSS Fidelity of Implementation Rubric (Implementation Rubric).
Description	• The Literacy Checklist assesses the extent to which school personnel are implementing the core components of multi-tiered system of supports (MTSS) in the topic area of literacy. • It is used in conjunction with the Implementation Rubric.
Intended administrators	• Districts participating in the onsite training through the State Personnel Development Grant (SPDG) are intended to administer the Literacy Checklist and the Implementation Rubric. Non-SPDG districts also have an opportunity to participate in trainings and administer the tools.
Recommended frequency of administration	• The state coach recommends that the Implementation Rubric and Literacy Checklist be administered once a year.
Intended users and recipients of data	• Districts enter their information electronically and submit it to statisticians for the SPDG evaluation. • MTSS coaches have access to the information online prior to submission to statisticians.
Use	• The Implementation Rubric is used to help schools assess whether they are implementing the essential MTSS components and where they need improvement. • After the Implementation Rubric is administered, the Literacy Checklist is used to determine which school staff are implementing the core features of MTSS for literacy and to help schools develop next steps for planning.
Rationale for development	• Wyoming developed the Literacy Checklist as a follow-up to the Implementation Rubric to gain more specificity around literacy for some of the items used by school teams. Literacy was an area in which Wyoming thought it could make a difference, and it wanted to ensure that research from the National Reading Panel report was included in the tool.
Development approach	• Tool development was funded by Wyoming's SPDG project, the Wyoming Instructional Network–Improving Outcomes for Students with Disabilities (Project WIN), which was funded from 2011 to 2016. A no-cost extension has allowed Project WIN to continue funding to support districts with MTSS implementation, including training on the use of the tools. • The state Department of Education, MTSS state coaches, and experts from the NCRTI assisted with the development of the Literacy Checklist. The NCRTI experts assisted with aligning the Literacy Checklist with the Implementation Rubric. Team members participating in the development of the Literacy Checklist brought expertise in coaching, implementation, MTSS, and statistics. • The tool was influenced by Montana's tool and the literature on reading and development. • The Literacy Checklist was published in 2016 and is currently undergoing informal field testing. The state is asking districts and schools about what is and what is not working when they use the tool. They are learning that the tool is too long and have plans to reduce it. • There is no information about the technical properties for either the Literacy Checklist or the Implementation Rubric.

Wyoming	
Tool details	Profile
Training and coaching on how to use the tool	• Teams of two to five members from each school are trained onsite by an MTSS coach. Trained team members include administrators, teachers, service providers, and school psychologists. Districts that have not been part of the trainings may also receive technical assistance from the MTSS coach. • A single MTSS coach conducts onsite trainings. Training is supported by funding from the SPDG. Schools using SPDG money are required to be trained on the state's MTSS tools, though non-SPDG schools may volunteer to be trained. Approximately 8–10 school districts (of a total of about 48) in Wyoming are actively engaged in MTSS implementation using both tools. • Training consists of four days of onsite training on seven modules over the course of a year. There are also two coaching conference calls a month. The onsite training is the same across schools. When working with individual teams, the coach will tailor the coaching to the school's specific needs. Districts may request additional follow-up after training.
Challenges, recommendations, and lessons	• Wyoming notes that developing a tool is time intensive and may not be necessary, given that there are many tools available today that are similar to its tool. During tool development, there was often difficulty reaching consensus on items because of the varied perspectives and expertise of those providing input. • The data from the tools are helpful in planning next steps, but the length of the Literacy Checklist can be problematic. The alignment of the Literacy Checklist with the Implementation Rubric has led to questioning of the overlap and of the need for two tools. Wyoming continues to look for ways to reduce the length of the tools and the implementation burden on districts and schools. The state recommends selecting only a few items to focus on at a time. • Wyoming also notes that one challenge is a lack of directives and clear guidelines at a state level on MTSS and its implementation. For example, there are no formal guidelines or protocols for following up with schools after training. The state also funds several optional initiatives, including MTSS, and it is not clear to schools how they are all aligned and in which initiatives they should be participating. • Wyoming is also interested in embedding more implementation science within its tools.

Images of a rubric and rating scale

Figure D1 provides a screenshot of a rubric (North Carolina's Self-Assessment of MTSS), and figure D2 provides a screenshot of a rating scale (Wisconsin's School-Wide Implementation Review).

Figure D1. Screenshot of a rubric tool: North Carolina's Self-Assessment of MTSS

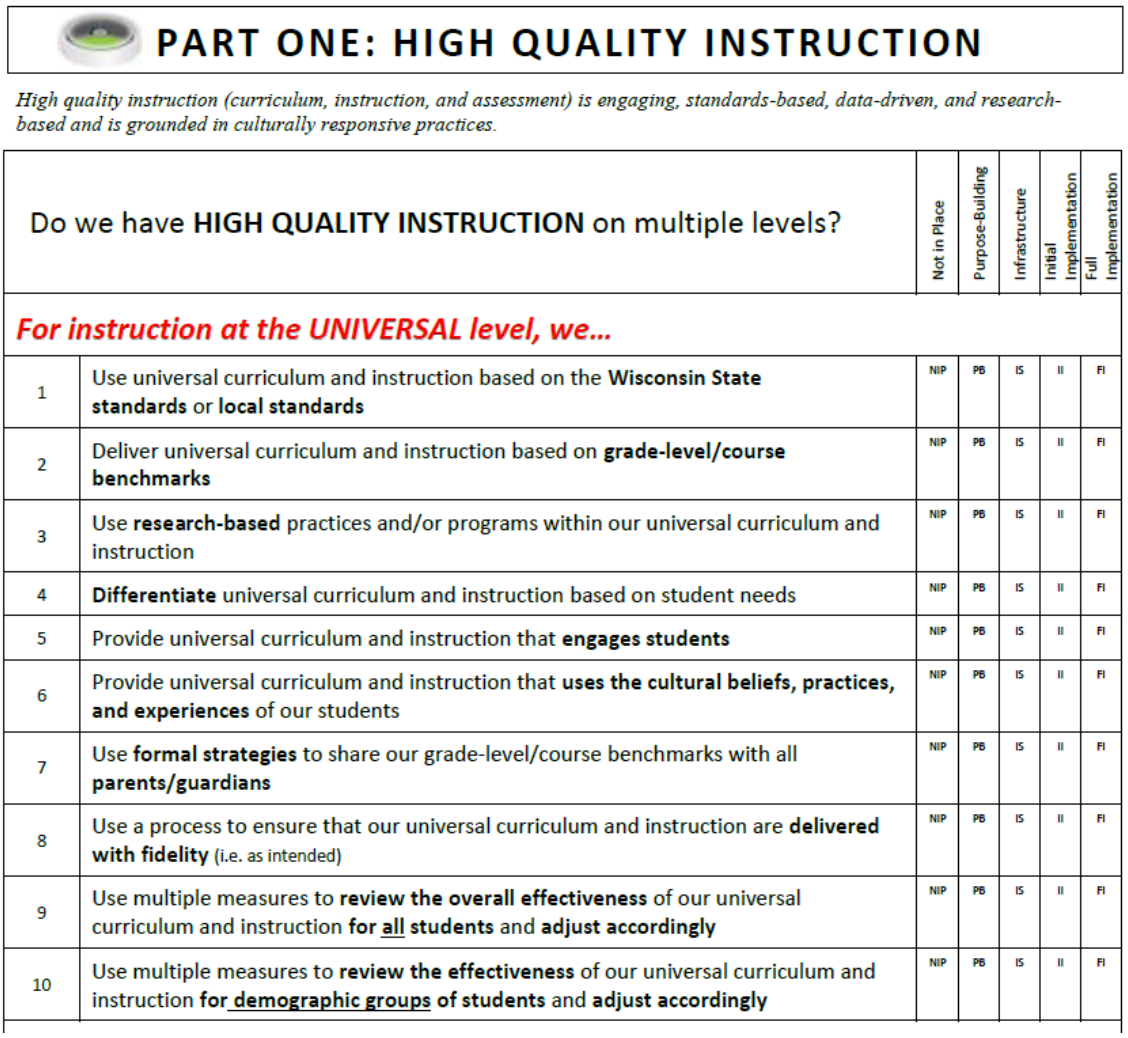
MULTI-TIERED SYSTEM OF SUPPORT
NC Department of Public Instruction

SAM Item and examples of supporting evidence	Not Implementing	Emerging/Developing	Operationalizing	Optimizing
10: Coaching is used to support MTSS implementation • Coaching logs/documentation of coaching activities/opportunities • School improvement plan includes information about coaching supports and structures around MTSS • PLC/Grade Level/Department Team meetings logs evidencing coaching opportunities	No coaching is provided to build staff capacity to implement the critical elements of MTSS	Initial coaching is occurring that is focused primarily on facilitating or modeling the components of MTSS	AND coaching activities are expanded to include: 1) opportunities to practice, 2) collaborative and performance feedback	AND data on professional development, implementation fidelity, and student outcomes are used to refine coaching activities
11: Schedules provide adequate time for trainings and coaching support • Master schedule has time provided for PD and coaching • PLC/Grade level/Department agendas evidence coaching support/coaching opportunities • PD calendar	Schedules do NOT include time allocated to professional development and coaching for MTSS	Schedules include time allocated for trainings	AND schedules include time for ongoing coaching support	AND schedules permit personnel to access additional training and coaching support that is differentiated based on their needs
12: Schedules provide adequate time to administer academic, behavior and social-emotional assessments[9] needed to make data-based decisions • Master schedule or master calendar with time for data collection included • Assessment calendar	Schedules do NOT include time allocated to administering assessments needed to make decisions across tiers	Schedules include time for academic, behavior and social-emotional assessments administered to all students (e.g., universal screening)	AND schedules include time to administer more frequent progress monitoring assessments to students receiving Tier 2 and 3 services as specified (e.g., weekly or monthly assessments)	AND schedules permit personnel to administer additional assessment (e.g., diagnostic assessments) across content areas and tiers needed to engage in data-based problem-solving
13: Schedules provide adequate time for multiple tiers of evidence-based instruction and intervention to occur • Master schedule with evidence of intervention/instruction time based on needs of school population (adequate time for Core, Supplemental and Intensive)	The master schedule is developed without student data and does not include time for multi-tiered interventions	The master schedule is developed utilizing student data and includes time for multi-tiered interventions	AND the master schedule facilitates effective implementation of multi-tiered interventions matched to student needs by content area and intensity (Tier 1, Tier 2, Tier 3)	AND the master schedule allows for flexible student groupings
14: Schedules provide adequate time for staff to engage in collaborative, data-based problem-solving and decision-making • Master schedule with evidence of data-based problem-solving time reserved	The master schedule does not provide opportunities for collaborative, data-based problem-solving and decision-making to occur	The master schedule provides opportunities to engage in collaborative, data-based problem-solving and decision-making to occur	AND the master schedule provides sufficient time for the process to occur with fidelity	AND the master schedule provides opportunities for collaborative, data-based problem-solving and decision-making to occur in settings such as: leadership team meetings, grade-level meetings, cross grade-level meetings, professional learning community meetings

Adapted from *The Self-Assessment of MTSS*. (2013). Florida's MTSS, Florida Department of Education. Adapted with permission.

Source: North Carolina's Self-Assessment of MTSS (2015). Retrieved April 30, 2018, from https://www.livebinders.com/media/get/MTQzNTk4NTE=.

Figure D2. Screenshot of a rating scale tool: Wisconsin's School-Wide Implementation Review



PART ONE: HIGH QUALITY INSTRUCTION

High quality instruction (curriculum, instruction, and assessment) is engaging, standards-based, data-driven, and research-based and is grounded in culturally responsive practices.

Do we have **HIGH QUALITY INSTRUCTION** on multiple levels?		Not in Place	Purpose-Building	Infrastructure	Initial Implementation	Full Implementation
For instruction at the UNIVERSAL level, we…						
1	Use universal curriculum and instruction based on the **Wisconsin State standards** or **local standards**	NIP	PB	IS	II	FI
2	Deliver universal curriculum and instruction based on **grade-level/course benchmarks**	NIP	PB	IS	II	FI
3	Use **research-based** practices and/or programs within our universal curriculum and instruction	NIP	PB	IS	II	FI
4	**Differentiate** universal curriculum and instruction based on student needs	NIP	PB	IS	II	FI
5	Provide universal curriculum and instruction that **engages students**	NIP	PB	IS	II	FI
6	Provide universal curriculum and instruction that **uses the cultural beliefs, practices, and experiences** of our students	NIP	PB	IS	II	FI
7	Use **formal strategies** to share our grade-level/course benchmarks with all **parents/guardians**	NIP	PB	IS	II	FI
8	Use a process to ensure that our universal curriculum and instruction are **delivered with fidelity** (i.e. as intended)	NIP	PB	IS	II	FI
9	Use multiple measures to **review the overall effectiveness** of our universal curriculum and instruction **for all students** and **adjust accordingly**	NIP	PB	IS	II	FI
10	Use multiple measures to **review the effectiveness** of our universal curriculum and instruction **for demographic groups of students** and **adjust accordingly**	NIP	PB	IS	II	FI

Source: Wisconsin's School-Wide Implementation Review (2015). Retrieved April 23, 2018, from https://www.wisconsinrticenter.org/assets/files/SIR/PrintFriendlySIR.pdf.

Examples of tool types by level of implementation

The following examples illustrate how tool types (rubric, rating scale, checklist, and survey) vary in how explicitly they specify what is expected of schools when implementing the same multi-tiered systems of supports/response to intervention (MTSS/RTI) dimensions (figures D3–D6). The research team chose "Administer universal screening measures" and two of its dimensions (administer at least twice a year and include all students) for the examples, as almost all tools included these dimensions.

In each example of a tool type, red boxes indicate the level of implementation and blue boxes indicate the explicit practice (dimensions). For example, the levels of implementation for the rubric in figure D3 are not implementing, emerging/developing, operationalizing, and optimizing.

Figure D3. Screenshot of a rubric on universal screening: Descriptions of expected practice for each level of implementation from North Carolina's Self-Assessment of MTSS

SAM Item and examples of supporting evidence	Not Implementing	Emerging/Developing	Operationalizing	Optimizing
12: Schedules provide adequate time to administer academic, behavior and social-emotional assessments[9] needed to make data-based decisions • Master schedule or master calendar with time for data collection included • Assessment calendar	Schedules do NOT include time allocated to administering assessments needed to make decisions across tiers	Schedules include time for academic, behavior and social-emotional assessments administered to all students (e.g., universal screening)	AND schedules include time to administer more frequent progress monitoring assessments to students receiving Tier 2 and 3 services as specified (e.g., weekly or monthly assessments)	AND schedules permit personnel to administer additional assessment (e.g., diagnostic assessments) across content areas and tiers needed to engage in data-based problem-solving
34: Staff understand and have access to academic, behavior and social-emotional data sources that address the following purposes of assessment: 1) identify students at-risk academically, socially, and/or emotionally, 2) determine why student is at-risk, 3) monitor student academic and social-emotional growth/progress, 4) Inform academic and social-emotional instructional planning, 5) determine student attainment of academic/behavioral outcomes • Assessment Plan (within or separate from MTSS implementation plan) • Assessment inventory • School Improvement plans • Screening results and use in identifying students at-risk • Intervention Plans	Staff do not understand and have access to academic, behavior, and social-emotional data sources that address the purposes of assessment	Staff learn the purposes of assessment within MTSS and the leadership team selects measures for the purposes of assessment across academic, behavior and social-emotional areas that are reliable, valid and accessible, as well as culturally, linguistically, and developmentally appropriate	AND staff engage in assessment with fidelity to: 1) answer predetermined guiding/critical questions regarding student functioning/outcomes, 2) identify students who are at-risk at least 3-4 times/year, 2) determine why a student is at risk, 3) monitor student growth/progress, 4) inform instructional/intervention planning, 5) determine student attainment of academic, behavior, and social-emotional outcomes	AND the leadership team and/or staff collaboratively and systematically evaluate and adjust assessment practices to ensure availability of accurate and useful data to inform instruction, and assessment tools are evaluated for continued value, usefulness, and cultural, linguistic, and developmental appropriateness

Source: North Carolina's Self-Assessment of MTSS (2015). Retrieved April 30, 2018, from https://www.livebinders.com/media/get/MTQzNTk4NTE=.

Figure D4. Screenshot of a rating scale on universal screening: Statement of ideal practice and the level of implementation from Wisconsin's School-Wide Implementation Review

Do we use **BALANCED ASSESSMENTS** to continuously review student progress?		Not in Place	Purpose-Building	Infrastructure	Initial Implementation	Full Implementation
For assessment of learning at the UNIVERSAL level, we…						
19	Use a **process to** screen all students on grade-level/course benchmarks multiple times each year	NIP	PB	IS	II	FI

Source: Wisconsin's School-Wide Implementation Review (2015). Retrieved April 23, 2018, from https://www.wisconsinrticenter.org/assets/files/SIR/PrintFriendlySIR.pdf.

Figure D5. Screenshot of a checklist on universal screening: Ideal practices and the presence or absence of each practice from Pennsylvania's Using Response to Intervention (RtI) for Specific Learning Disability (SLD) Determination School Building Application (K–12) for Approval

Implementation Recommendations and Resources:	LEA Discussion Items:	Required Documentation for Submission:	*Evident	*Not Evident
Fidelity of Universal Screening requires that a system is in place to assess the health of tier 1/core instruction for all students. Screening data is used to inform instructional practices and ultimately change predicted outcomes earlier rather than later, especially for the most vulnerable students. All students are screened a minimum of three times per year to assess whether differentiation is working to grow "all students" regardless of a student's proficiency status.	• Indicate the instrument that you use and how often it is used to conduct universal screening each year. If the instrument used is NOT listed on www.rti4success.org, reference established reliability and validity of the screening measure and describe how it matches expectations for learning in a specific grade level. • Describe how adherence to standardization and scoring rules (of test administration) is monitored.	2a. Describe the process for establishing cut points to identify student needs that warrant provision of tier 2 and/or tier 3 services. 2b. Identify the timeline and meeting structure that is used to facilitate grade level analysis and goal setting relative to honing tier 1/core instruction after screening/benchmarking is conducted.		

Source: Using Response to Intervention (RtI) for Specific Learning Disability (SLD) Determination School Building Application (K-12) for Approval (2017). Retrieved July 23, 2018, from https://www.pattan.net/getattachment/Multi-Tiered-System-of-Support/Response-to-Intervention-RTI/RTI-SLD-Determination/UsingResponseIntervention_SL.PDF/?lang=en-US.

Figure D6. Screenshot of a survey on universal screening: Ideal practices and the presence or absence of the practice from New York State Self-Assessment Tool for RtI Readiness and Implementation

	To what degree is my school/district implementing this practice?			
	not currently implementing	partial implementation	full implementation	don't know
Assessment: Screening	1	2	3	DK
1. My school/district has an already identified screening/benchmarking tool that will be used for determining at-risk status.				
2. My school/district has established a regular schedule for screening ALL students in grades K-4 a minimum of three times per year.				

Source: New York State Self-Assessment Tool for RtI Readiness and Implementation (2010). Retrieved August 21, 2018, from https://nysrti.org/files/documents/resources/forms/new_york_state_self_assessment_tool_for_rti_readiness_as_word_doc_updated_1_8_14.pdf.

What the tool is designed to assess

What the tool is designed to assess and whether evidence to justify ratings is requested varies by tool type (table D2).

Table D2. What the tool is designed to assess and whether evidence to justify ratings is requested for 31 tools, by tool type

Tool type	What the tool is designed to assess		Number of tools requesting evidence to justify rating	Number of tools *not* requesting evidence to justify rating
	Number of tools assessing fidelity to expected practices along a continuum	Number of tools assessing stages of an implementation continuum against only an ideal practice		
Rubric	13	0	10	3
Rating scale	0	6	4	2
Checklist	0	4	2	2
Survey	2	6	0	8
Total	15 (48 percent)	16 (52 percent)	16 (52 percent)	15 (48 percent)

Source: Authors' in-depth analysis of tools from the website and document review in 2018.

Proportion of key practices addressed by each tool type

Table D3 provides information on the tools that address at least 75 percent of the components, subcomponents, and dimensions and at least one of the other three key characteristics of a well-developed tool (the tool requests evidence, the state conducted a pilot test of the tool, or the tool has publicly available technical adequacy information). The average for each tool type (rubric, rating scale, checklist, and survey) shows how these highlighted tools compared with other tools of the same type.

References

Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. Alexandria, VA: Association for Supervision and Curriculum Development.

Erickson, A. G., Noonan, P. M., & Jenson, R. (2012). The school implementation scale: Measuring implementation in response to intervention models. *Learning Disabilities: A Contemporary Journal*, *10*(2), 33–52.

Table D3. Percentage of key multi-tiered systems of supports/response to intervention practices addressed by each tool type, by state

State	Tool name	Components addressed (percentage) (*N* = 4)	Subcomponents addressed (percentage) (*N* = 8)	Dimensions addressed (percentage) (*N* = 24)	Tool requests evidence	State conducted pilot test of tool	Tool has publicly available technical adequacy information
Rubric. An assessment tool that articulates the expectations for implementation of multi-tiered system of supports (MTSS)/response to intervention by providing coherent criteria and descriptions of performance levels for these criteria. Rubrics describe, rather than judge, levels of performance.[a] This tool is completed by a school- or district-based team. (*n* = 13)							
Minnesota	Minnesota Reading Tiered Fidelity Inventory	100	100	75	Yes	No[b]	No
All 13 rubric tools	**Average of all 13 rubric tools**	**77**	**82**	**53**	***n* = 10**	***n* = 5**	***n* = 1**
Rating scale. An assessment tool that presents a list of ideal MTSS/RTI practices with a place for observers to mark the degree to which each practice is displayed (for example, not in place, purpose-building, infrastructure, initial implementation, and full implementation). Rating scales do not provide descriptions for each level of performance but simply state the ideal practice. This tool is completed by a school- or district-based team. (*n* = 6)							
Wyoming[c]	MTSS Implementation Checklist Literacy	100	100	83	Yes	No	No
All 6 rating scale tools	**Average of all 6 rating scale tools**	**58**	**75**	**50**	***n* = 4**	***n* = 3**	***n* = 2**
Checklist. An assessment tool that presents a list of ideal MTSS/RTI practices, with a place for observers to mark whether that practice is present or absent. Checklists do not provide descriptions of levels of performance for each ideal practice. The tool is completed by a school- or district-based team. (*n* = 4)							
Pennsylvania[c]	Using Response to Intervention for SLD Determination: School Building Application (K–12)	75	88	75	Yes	No	No
All 4 checklist tools	**Average of all 4 checklist tools**	**56**	**75**	**31**	***n* = 2**	***n* = 2**	***n* = 0**
Survey. An assessment tool that collects information from a sample of specific individuals (for example, teachers) who report to what degree or whether ideal MTSS/RTI practices are present or absent in their school or used by them. The tool may include a numeric or categorical rating scale or yes/no response options. (*n* = 8)							
New York	New York State Self-Assessment Tool for RtI Readiness (targets elementary schools)	100	100	75	na	Yes	No
All 8 survey tools	**Average of all 8 survey tools**	**66**	**78**	**31**	**na**	***n* = 5**	***n* = 1**

na is not applicable.
a. Brookhart, 2013.
b. State personnel reported that they were piloting the tool at the time data for the study were being collected.
c. State was part of the interview sample.
Source: Authors' in-depth analysis of tools from the website and document review in 2018.

Appendix E. Addressing academics and behavior in multi-tiered system of supports and response to intervention tools

Of the 21 states in this study, 18 used at least one tool that addressed both academics and behavior, 12 used a multi-tiered system of supports (MTSS) framework, and 9 used a response to intervention (RTI) framework. In line with the definition of MTSS (see box 1 in the report), all 12 states using an MTSS framework had tools that included a focus on at least one academic subject or behavior (table E1). Even though RTI is often thought to focus primarily on academics, 6 of the 9 states that used an RTI framework had tools that addressed both academics and behavior. The use of RTI to describe a tiered system of supports for both academics and behavior provides evidence that some states may be using MTSS and RTI interchangeably. However, other states are using the term RTI to refer specifically to academics.

Similarly, all 19 of the 31 tools intended to assess implementation of an MTSS framework included a focus on at least one academic subject area and behavior. Half the tools (6 of 12) that were intended to assess an RTI framework addressed both academics and behavior (table E2).

Two interview respondents discussed the opportunities and challenges of creating a tool that merges academics and behavior within an integrated framework. Both respondents spoke about the benefit of having staff from the state's MTSS or RTI and positive behavioral interventions and supports initiatives engage with each other to establish common terminology. However, one respondent remarked that while everyone agrees conceptually that there should be integration and alignment of academic and behavioral interventions, achieving this technically is complicated. Some of the challenges cited were negotiating different philosophies about the emphasis that should be placed on teacher referrals, coaching models, and essential topics for professional development.

Table E1. Topical focus of tools for assessing implementation of multi-tiered system of support/response to intervention frameworks at the state level

Topical focus	Number of states (*N* = 21)	Percent of states
Multi-tiered system of supports		
General academics and behavior	8	38
Math, literacy/reading, and behavior	2	10
Literacy and behavior	2	10
Subtotal	12	57
Response to intervention		
General academics and behavior	6	28
Literacy and math	1	5
Literacy	1	5
Schools seeking approval to use response to intervention for specific learning disability determination for reading, writing, or math	1	5
Subtotal	9	43

Note: Percentages do not sum to 100 percent due to rounding.
Source: Authors' in-depth analysis of tools from the website and document review in 2018.

Table E2. Topical focus of for assessing implementation of multi-tiered system of support/response to intervention frameworks at the tool level

Topical focus	Number of tools (*N* = 31)	Percent of tools
Multi-tiered system of support		
General academics and behavior	9	29
Reading, math, and behavior	4	13
Literacy and behavior	5	16
Math and behavior	1	3
Subtotal	19	61
Response to intervention		
General academics and behavior	6	19
General academics	1	3
Literacy and math	1	3
Literacy	2	6ss
Math	1	3
Schools seeking approval to use response to intervention for specific learning disability determination for reading, writing, or math	1	3
Subtotal	12	39
Total	31	100

Note: Percentages do not sum to 100 percent due to rounding.

Source**:** Authors' in-depth analysis of tools from the website and document review in 2018.