

Growing an Intervention System

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Spring is upon us! Spring nurtures growth all around by providing the additional sunlight, rain, and warm temperatures needed for a myriad of plants to bloom and grow. Just as Spring brings favorable conditions for trees and flowers to flourish—a multi-tiered system of support creates an optimal school environment where students and staff can grow and thrive.

This article, the fourth in a four-part series, is aimed to help middle level educators conceptualize North Carolina’s Multi-Tiered System of Support (MTSS) and better understand how the MTSS framework can be used to support school improvement, student academic success, and well-being. The first and second articles of this series discussed myths associated with MTSS and the recommended teaming structures to support the NC MTSS framework, respectively. The third article described the significance of solid core instruction as the foundation of MTSS. In this current piece (article four) we will continue to build understanding of multi-tiered instruction, specifically focusing on the intervention system. While this article can be read as a stand-alone piece, it is

recommended that readers peruse previous articles for additional context.

Universal Screening/ Mid-Year Data Review

MTSS is a continuous improvement model where school teams regularly analyze data and make adjustments to meet the needs of students, first by investigating the effectiveness of core instruction, then through examining the need for additional instructional support or intervention. To accomplish this, school-based MTSS teams typically utilize universal screening data considering school-wide academic, behavior, social, emotional, and attendance needs at beginning, middle, and end of year intervals. A universal screening system allows district and school teams to synthesize multiple sources of data to make predictions about the future instructional performance and educational outcomes of students. After examining the effectiveness of core instruction across the school and grade levels, school MTSS teams analyze the data to determine groups of students who may be at risk. Once potential risk is identified, school MTSS teams can then use data decision guidelines to determine how they can best distribute or tier their intervention resources to meet student needs.

What is intervention?

NC MTSS defines *intervention* as “The systematic and explicit instruction provided to accelerate growth in an area of identified need” (NC MTSS Glossary of Terms, 2022). By *systematic*, we mean that the instruction

provided for intervention follows a logical sequence and is sequential in its structure. *Explicit* describes a clear and unambiguous method of instruction that is intentional to address the identified needs. Intervention is designed to improve performance relative to a specific, measurable goal. These goals may be designed to address academic, behavioral, social, emotional, and/or attendance concerns. No matter the area of need, interventions are based on valid information about student current performance, designed to be applied in a meaningful and realistic way, and include methods for ongoing student progress monitoring.

Interventions can sometimes be confused with accommodations or modifications, remediation or differentiation, or even tutoring scenarios. However, true intervention includes the characteristics previously described, with instruction carefully designed to target a specific skill or set of skills. Unlike remediation, instructional intervention is not always directly tied to the North Carolina instructional standards themselves— instead, they address the underlying skills needed in order to be successful with those grade level standards. Effective interventions are backed both by research and evidence that confirms their effectiveness in improving the progress on identified skills.

Although intervention may be provided by educators who serve in a variety of roles and positions, it is best practice for MTSS teams to match staff to student intervention groups based on specialized training and expertise in the specific area of need. In addition, educators providing intervention should be adept in making instructional adjustments, providing frequent and constructive instructional feedback, allowing students ample opportunities for practice, and on-going assessment of student progress. Skilled interventionists ensure that

explicit instruction is delivered utilizing an evidence-based instructional method in a prescribed sequence.

Standard Treatment/Standard Treatment Protocol (STP)

NC MTSS recommends using a standardized approach to design and implement intervention. This can be referred to as a standard protocol or standard treatment protocol (STP). In most cases, educators are familiar with the recurrent skill needs and issues that students demonstrate in their particular grade span. For example, each year, middle grade math teachers may work to support students struggling with rational number reasoning or algebraic expressions. These are areas in which students entering higher grade math classes commonly struggle. We also rely on national research to identify areas across literacy, math, social, emotional and behavior where students in middle grades most frequently have difficulty. If we encounter these struggles year after year and trends from our universal screening tell us our students typically need additional support with certain skills, doesn't it make sense to get ahead of the struggles and create a proactive plan for how to intervene in these areas? That is exactly what a standard treatment protocol aims to do. NC MTSS recommends having a "standard treatment" for intervention, which specifically outlines our response (how we tailor instruction) so that we are prepared to intervene quickly when student needs arise.

NC MTSS recommends an STP that defines curriculum, instruction, environment, and data evaluation for each of the areas where students commonly experience needs and challenges, as shown in Table 1 (Intervention Matrix Rubric, 2022).

Table 1 *Intervention Matrix Rubric*

Instruction	Curriculum	Environment	Data-Evaluation
Daily instructional routines include:	Pre-Designed Curriculum materials include:	Intervention environment is set up to include:	Data-Evaluation planning for the intervention includes:
Explicit modeling of concepts/skills by the interventionist	Systematic scope and sequence of skills within a program that is multi componential	Instructor that is trained in the curriculum program and practices utilized	Progress monitoring: Using multiple measures to measure student and group response to intervention <u>Academic Progress Monitoring</u> <u>Behavior Progress Monitoring</u>
Opportunities for guided practice within each lesson, including scaffolding to move students to mastery	Controlled introduction of small sets of skills/concepts	Group size based on program recommendations	Diagnostic assessments or placement tests if universal screening system data alone is not sufficient for intervention matching
Multi-sensory activities included in guided practice (academics)	Opportunities for frequent review and practice of previously mastered concepts	Dosage: Time scheduled for the intervention is scheduled according to program recommendations;	Data decision rules for intervention entry, intervention intensification, group response and intervention exit
Intervention is designed to help students transfer skills and see connections between mastered and related skills	Multiple opportunities for student to respond and receive corrective feedback are incorporated	Frequency and Duration: How often and how long?	Information about who and how often data will be analyzed to determine next steps
	Resources for curriculum reviews: <u>Reading League Curriculum Review</u> <u>CASEL Program Guide</u> <u>National Center on Intensive Intervention</u> <u>IRIS</u>	Behavioral support: program incorporates self-regulation and executive function components and behavioral principles to minimize non-productive behavior	Fidelity Checklists are included.

A well-planned STP designates if the intervention is used to support supplemental (tier 2) or intensive (tier 3) needs and provides reference to aligned core guidance and resources. It should list the curricular materials to be utilized for intervention in a specific area of need and describe exactly how direct, explicit instruction would be provided for that particular intervention group. Additionally, an STP outlines recommendations regarding group size, duration of the lesson, and frequency of intervention sessions. The STP also outlines which data sources should be used for on-going progress monitoring, and to make decisions about intervention entry, exit, and intensification.

Typically, STPs are developed at the district level. District MTSS Teams often research, appraise, and procure evidence-based instructional resources such as curriculum, programs, instructional materials, and assessment tools based on resource mapping activities and through the analysis of district and school data indicating need. This work is used to develop district-wide standard treatment protocols. In some cases, school MTSS teams may then tailor the STPs based on school-specific data, and begin steps to implement those protocols. Before students can receive the instruction outlined on the STP, administrators must work with staff to develop a master schedule that includes protected time for intervention to occur. In addition, teachers or other staff must be trained to appropriately utilize data to identify groups of students or individual students that would benefit from the prescribed intervention. They also should receive professional development and coaching support on how best to deliver the intervention according to the STP. With proactive planning and training, effective

interventions may be offered to students in a timely manner, resulting in positive outcomes for students and increased efficiency for school MTSS teams and PLCs. Teachers no longer have to waste time searching the internet for intervention ideas or resources since the instruction and support procedures are already defined through standard protocols.



If we think of Springtime and the plant metaphor mentioned at the beginning of this article, we can compare a standard treatment protocol to the plant tag that accompanies newly purchased plants. This little plant stake concisely, but thoroughly describes how we care for the plant. It tells us the plant needs 4-6 hours of sun each day. It also describes the type of soil needed and outlines the watering schedule we should follow to ensure growth. The recommendations on the tag have been determined by years of research and practical evidence which verify optimal growth of the plant under the specified conditions. In a way, this is the standard protocol for growing that type of plant. We want to provide a similar structure to

support our teachers and staff with growing our students in identified areas of need.

Intervention System

The standard treatment protocol is an essential resource to successfully providing interventions, but in an MTSS, the goal is to build a well-defined *intervention system* that is highly effective for meeting the needs of students, while also operating efficiently for the adults.

In a well-functioning MTSS, the multi-tiered instruction and intervention model is well defined throughout the STP. Teachers do not have to agonize over the identification and delivery of effective interventions for individual students, because vetted, evidence-based interventions proven to work well for most students with specific areas of need have been pre-designated and described in the standard treatment protocol. When developing STPs, district and school MTSS Teams thoughtfully explore and clearly define intervention programs, resources, and instructional guidance so that educators and staff can easily carry out small group or individual interventions. To do so, additional considerations are necessary for the STP to be applied in a practical and effective manner by school teams and staff. These considerations include determining intervention entry and exit rules, examining the fidelity of intervention, and ascertaining the effectiveness of intervention. The following paragraphs describe a few of the components particular to successful implementation of an intervention system.

Professional Development

If staff are expected to know how to deliver interventions outlined in the standard treatment protocol, then they need to be adequately trained to do so. Part of building

an effective, efficient intervention system includes determining the professional development needed to support those educators implementing intervention and designing a PD and coaching plan to address those training needs.

When planning intervention systems at the school level, school MTSS teams examine patterns in their student data to determine trends by areas of need, grade level, etc. They also study school schedules, staff capacity to deliver the STP (expertise and availability), and inventory the resources available to support the provision of interventions. Just as the District MTSS Team needs a professional development plan to ensure successful intervention, so should the school. Throughout the year at both district and school levels, teams will need to re-evaluate and update their PD plan as capacity is built, feedback is gathered, and/or new needs are identified.

Intervention Entry Rules

In order to create effective intervention groups, districts set guidelines for identifying academic, SEB, and attendance risk, utilizing the assessment tools they have available. Based on district-wide data and the technical specifications of screening tools, districts may generate recommendations that specify thresholds, where students falling below a certain level or score on a screening assessment should be considered “at risk”. These general guidelines are used by school problem-solving teams as they determine how support will be provided within their schools and which students are most likely to need supplemental or intensive instruction.

The level of risk present within each school or grade level will need to be examined by school MTSS teams. Students considered for potential risk do not always immediately receive support through

supplemental or intensive intervention. In some situations, the number of students identified for intervention may be so great that it makes most sense to provide support to all students through intensifying core instruction. This is helpful in situations where the number of students not meeting grade-level expectations exceeds the school's resource and staffing capacity to provide intervention through small group or individual instruction. In cases like these, the intervention support is then pushed into the core classroom, where a greater number of students will have access to and benefit from the intervention. By intensifying core instruction for all students and focusing supplemental and intensive intervention resources on students with the greatest need, schools can create more manageable intervention systems, and have confidence that students identified for supplemental and intensive support are receiving both quality core instruction and well-designed intervention to meet their needs.

Furthermore, certain intervention programs may have their own recommendations for intervention appropriateness (entry) and schools must work with their students and staff to adhere to those as strongly as they can. Teachers should not make student support decisions in isolation. NC MTSS recommends the use of team-based decision making using clear intervention entry guidelines. One example of this is to set additional criteria for intervention entry through what is known as *multiple gating*. This involves using existing data to determine risk and then using another piece of data to confirm that risk or match to intervention. In this situation a team may look first at an adaptive computerized assessment to determine risk. If there are larger number of students presenting with risk, the team may need to adjust core and look to another data source (or gate) to determine how intervention

resources will be tiered. Intervention resources may then be designated to only those students presenting at risk on the computerized screening assessment *and* not passing an end of grade test. This guidance to look at multiple gates or data sources in a given scenario should be defined ahead of time as part of the intervention system so that when needs arise, school teams know how to quickly adjust and make decisions.

Intervention Integrity

Once plans for professional development and intervention entry have been established, school teams must also consider measures to ensure intervention integrity. What does intervention integrity mean? Simply stated, it means that a specific intervention plan or program is implemented exactly as designed. Educators and staff providing instruction demonstrate intervention integrity by providing intervention per the guidance of the standard treatment protocol and in alignment with the training they received for that specific intervention. Instruction is delivered as shown on the intervention plan, with close attention to intervention frequency, session duration, group size, and adherence to instructional protocols.

School MTSS teams should then monitor intervention delivery, continuing to support teachers and staff by observing the intervention in practice and providing feedback as needed. This can be accomplished by school MTSS teams setting a schedule for routine checks and observations. Additionally, time should be allocated for school MTSS teams to analyze the intervention observation data and problem solve any barriers preventing staff from delivering interventions as intended. Challenges in intervention fidelity may link back to the intervention requirements of the STP, complications with the school

schedule, or the need for more professional development. All of these aspects need to work together systematically, thus illustrating the need for district and school MTSS teams to spend adequate time, attention and resources to building an intervention system rather than simply creating a menu or list of interventions.

Intervention Effectiveness

Once school teams feel confident that interventions are consistently implemented with integrity, as previously described, they can then begin to examine the effectiveness of the interventions provided. In order to make this determination, district and school MTSS teams need access to consistently collected implementation data and student progress monitoring data. The specific data to be collected should be described within the standard treatment protocol for each area of need.

As staff provide intervention and collect data, school based MTSS teams periodically review the data. First teams examine implementation data, considering whether the intervention has been provided as prescribed in the STP. For example, the team may examine school-wide or grade level specific data to assess whether the number of intervention sessions provided and intervention session time matches the number of sessions and session time described in an intervention group's instructional plan. They may consider the number of days students or staff were absent or if there were natural disruptions such as holidays or long breaks during the intervention cycle and discuss how this impacts student growth.

After examining the implementation of the intervention protocol itself, teams can assess intervention effectiveness data. When a school utilizes a certain intervention protocol, they want to determine if that

intervention is being successful for the entire group or population that is receiving that intervention. For example, if 100 students across grades 6-8 are receiving a fluency, vocabulary and comprehension intervention, the team would ask, "*Are the majority of students receiving this intervention showing progress?*" This is to ensure the efficacy of the intervention as a whole. In order to say that an intervention is effective, the majority of the students (75-80%) should be making progress. If the majority of students are not making progress, then the team should collaboratively problem-solve to address issues with the design or implementation of the intervention protocol before making decisions regarding individual students. (Data/Evaluation in a Multi-Tiered System of Support, 2022)

If the intervention is effective for most of the students in the group, then teams can further examine the intervention effectiveness for smaller groups or individuals. Generally, assessment and progress monitoring tools provide graphable data that visually indicates a student's response to the instruction provided. This data can be utilized to study growth across groups of students or individual students, compare student progress to state or national norms, and examine rates of improvement, or other criteria. District/School MTSS teams specify tools to monitor interventions within an STP, and then they must further establish data decision rules and guidance for how the data is to be utilized within their system of support.

When making student support decisions, it is important to note that all data (e.g. classwork examples, tests, intervention-based work, progress monitoring data, computer adaptive assessment, observation data) gathered regarding student progress is relevant and should be given equal consideration. Additionally, current research indicates that length of time of intervention

rather than number of data points collected should be the primary method of determining when to assess a student's response to intervention. "Data point rules are used to see if they made progress or not but these decisions cannot be made if the student has not been given enough time in the instruction to make progress (Data/Evaluation in a Multi-Tiered System of Support, 2022).

Teachers and/or staff deliver interventions, collect data, and contribute as an important member of the decision-making team, and ultimately determine the effectiveness of the instructional support offered to students. These roles are most easily accomplished when district and school MTSS teams create an intervention system which includes data decision rules and guidance based on instructional research and the recommendations of the assessment tools that they are utilizing.

A clearly defined intervention system enables MTSS teams to effectively utilize data to recognize the need for adjustments to core instruction, pinpoint potential risk and student need for additional intervention, and determine how to best deliver intervention. Just like our beautiful summer gardens which take time to sprout and grow, intervention systems must be carefully planned and cultivated in order to produce fruitful outcomes. NC MTSS recommends both district and school teams work together to build a framework that best meets the needs of teachers and students. The North Carolina Department of Public Instruction, employs Integrated Academic and Behavior Systems (IABS) Consultants that partner with district and school teams to implement MTSS. A great first step in the work of implementing MTSS or in building an intervention system is to take part in the Facilitated Assessment of MTSS (FAM). There is a facilitated assessment for both the district team (FAM-D) and for school teams

(FAM-S). These facilitated self-assessments enable school teams to look deeper at a series of items aligned with successful MTSS implementation and then pinpoint both areas of relative strength and potential spaces for growth. With this information in hand, districts and schools may then craft a school improvement plan designed to facilitate student growth.

For more information on NC MTSS, visit:
<https://www.dpi.nc.gov/districts-schools/districts-schools-support/integrated-academic-behavior-systems>

***It is important to note that when individual students are discussed, the problem-solving team has an obligation to consider whether the student is suspected of having a disability. If so, the continuum of teaming extends/expands to include the IEP Team for an initial referral.*

References

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