

# Integration of Academic and Behavioral MTSS at the District Level using Implementation Science

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*The evolution of multi-tier systems of support (MTSS) for both academics and behavior has reflected the diverse interests of those leading implementation efforts, the influence of various state and local regulatory requirements, and differing funding methods and priorities. These variations have naturally led to many different pathways for implementing MTSS. Although the role of the district in MTSS has varied, many leaders in the field of education consider district leadership and involvement an essential component for successful MTSS implementation. District leadership in MTSS is used to provide schools with political and administrative support, training and technical assistance, layered in-service curricula, data-based decision making systems for ongoing evaluation, and access to interagency relationships for supporting student health and wellbeing. This article addresses the key district mechanisms that are used to integrate academic and behavioral interventions as school personnel learn new strategies for improving outcomes for students.*

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## INTRODUCTION

Two approaches for improving social and academic outcomes for students have gained national attention and are now implemented on a socially significant level: response to intervention and school-wide positive behavior support (Lane, Oakes, & Menzies, 2010; McIntosh & Goodman, in press; Stewart, Benner, Martella, & Marchand-Martella, 2007). Response to Intervention (RtI) is a tiered approach addressing all students within a school by providing the appropriate intensity of academic support necessary for educational progress (Batsche et al., 2005). School-wide positive behavior support (SWPBS) uses three prevention tiers to organize effective social skills instruction and behavioral interventions along a continuum of increasing intensity (Sugai & Horner, 2009). A number of professionals are advocating for an integration of RtI and SWPBS (Hawken, Vincent, & Schumann, 2008; Lane et al., 2010; Utley & Obiaker, 2012; Walker, Ramsey, & Gresham, 2004), while some have indicated concern that these models tend to be implemented in isolation from one another (Stewart et al., 2007).

Both RtI and SWPBS are based on a public health model for prevention (WHO, 2004) and are tailored to meet the needs of each student to ensure academic

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and social success (McIntosh, Horner, Chard, Boland, & Good, 2006). The implementation tiers for both RtI and SWPBS include universal screening and supports for all students, tier two strategies for early intervention when students are not responding to tier one, and intensive and individualized planning processes at tier three for students who are experiencing academic or behavioral challenges (Sugai et al., 2010). Additional practices that academic and behavioral multi-tier systems of support share include: (1) evidence-based curricular and instructional practices for all students, (2) a data-based framework for decision making, (3) use of a problem-solving process across all levels of the system, and (4) a team-based approach for leading, planning, and evaluating implementation efforts (Hawken et al., 2008).

In this article, we refer to the use of both RtI and SWPBS as multi-tier systems of support (MTSS), the integration of several tiered implementation models into one coherent, combined system meant to address the layered domains of education including literacy and social competence (Lane, Menzies, Ennis, & Bezdek, 2013; McIntosh & Goodman, in press). We will describe the essential role of district-level leadership in addressing the effective and sustainable implementation of MTSS. The key features describing systems change mechanisms that can be used by district teams to integrate academic and behavioral interventions will be discussed with examples of how district and school leaders applied these strategies in order to improve outcomes for their students.

### ***Challenges Encountered in Integrating MTSS***

The National Association of State Directors of Special Education developed a set of RtI blueprints that can be used by state, district, and building teams (Elliott & Morrison, 2008; Kurns & Tilly, 2008). These blueprints were designed to guide district and school teams throughout RtI implementation. The National Technical Assistance Center on Positive Behavioral Interventions and Supports (PBIS) (Sugai et al., 2010) also designed a tool for guiding state, district, and school teams implementing school-wide positive behavior support (SWPBS). Both the RtI and PBIS blueprints emphasize the use of consensus building among all stakeholders throughout the design and coordination of MTSS. Topics the PBIS blueprint address include funding issues, visibility of efforts, political support, training systems, coaching capacity, and evaluation (George & Kincaid, 2008).

**Differences in implementation stages.** The manner in which RtI and SWPBS implementation efforts are launched can create challenges for districts seeking to integrate academic and behavioral interventions. The evolution of a tiered system of support like SWPBS often reflects diverse funding methods, regulatory issues, and district priorities (Freeman, Perrin et al., 2009) leading to different pathways as MTSS has expanded across districts and schools. SWPBS may begin with a district training for a small number of schools with a long-term plan to increase the number of buildings participating over time. Once SWPBS training systems are established, the district may initiate a tiered RtI model for reading starting with the involvement of elementary schools and later extending these interventions to middle and high schools and across math and other academic areas. Other school districts begin MTSS implementation with academic tiered reading and math interventions with a plan to initiate SWPBS later once school buildings have more experience implementing RtI.

In yet other cases, technical assistance efforts have introduced the two models in a concurrent manner with training systems that address academic and behavior tiered implementation.

**District leadership and support.** Schools implementing MTSS may experience challenges related to district leadership and involvement. This can occur when state or district administrators make a public announcement that all schools will implement MTSS within the next several years without considering the planning and support systems that are necessary for proceeding forward (George & Kincaid, 2008). A newly hired superintendent introduces new initiatives within a district already implementing MTSS, reallocating funding and creating tension as priorities at a district level suddenly shift. District-level involvement and commitment to MTSS can facilitate a school's implementation efforts and improve outcomes when districts provide financial support, engage in joint problem solving, and support long-term systems change (Handler et al., 2007).

**Communication across tiered implementation efforts.** The importance of communication and collaboration across district support personnel is essential for integrated MTSS implementation. Challenges arise when implementation efforts taking place at the district level include academic and behavioral MTSS trainers who are not communicating and collaborating on a regular basis. An integrated approach for implementing MTSS is easier to accomplish with the direct involvement of district leaders who meet regularly to discuss implementation efforts, share data, design professional development, and establish integrated policies and practices for academic and social competence. The next section of this article will describe the role of the district leadership team in the successful integration of MTSS planning.

### ***The Role of the District in MTSS***

Forming a district leadership team is an important step in MTSS. Individuals who participate in the district leadership team represent key stakeholders including district and school administrators, district support personnel, general and special education teachers, and other identified stakeholders (e.g. union representative, community liaison). It is important for district professionals representing instruction and curriculum, special education, title programs and other federal/state initiatives, student health, safe and drug free schools, school psychology and counseling, drop out prevention, character education, alternative programming, data and information management, evaluation, and multi-cultural and affirmative action to participate in the district planning process. Bus drivers, students, family members, mental health professionals, children and family services, and other community members are involved in the team process although the structures for communicating to larger stakeholder groups vary across districts. For instance, some district teams choose to hold larger forums once or twice a year to share and gather feedback from larger numbers of stakeholders while maintaining a smaller district leadership team that meets on a more frequent basis. Communication with the education board is coordinated by the district team with regular school presentations, data summaries, and information shared with board members throughout the year. In other districts, individual board members are invited to attend leadership meetings.

District leadership teams work together to create a comprehensive plan for confirming annual readiness and commitment of participating schools, coordinating academic and behavioral training, aligning district policies with MTSS, and evaluating the effectiveness of these implementation efforts (George & Kincaid, 2008). A district coordinator guides MTSS, supports school teams, and gathers and summarizes evaluation data. The district coordinator role ensures that district leadership meetings occur regularly, agendas are prepared and meeting minutes recorded, data are collected and summarized across MTSS efforts, and training and technical assistance systems are organized (Sugai et al., 2010). The coordination of academic and behavioral training is based on roles that are established within the district. In some cases, the training for academic and behavioral MTSS are led by different district leaders with an overall MTSS coordinator whose role is to assist in integrating planning efforts.

**Layered MTSS trainings.** *Team-based trainings* are organized to introduce SWPBS and academic RtI to schools with follow-up events used to support ongoing implementation over two or more years. Team members are selected to represent all of the stakeholders associated with the school. In SWPBS, building level teams participate in the training with representation that includes teachers from each grade level, special and general education staff members, school psychologists, counselors, paraprofessionals, cafeteria and janitorial staff members, mental health professionals, students, family members, mental health and other community representation (Sugai et al., 2010). School teams preparing to implement academic RtI are similar in composition to its district counterpart; these teams include individuals responsible for launching new academic systems change and professionals with expertise in academic areas targeted for intervention.

In some cases, schools establish a unified academic and behavior MTSS team while sending different individual school faculty to participate in SWPBS team training and RtI academic instructional events. These school teams may meet together as a unified MTSS team throughout the year with the goal of integrating both RtI and SWPBS under the umbrella of school improvement. Other schools establish separate academic and behavioral team meetings with individual leaders assigned to each of the meetings as a communication link to share progress occurring within the different tiered models of implementation. In either scenario, the goal of MTSS is to gather information and bring it to all faculty to ensure consensus-driven action planning occurs for academic and behavioral implementation.

SWPBS teams include an internal school coach who assists in facilitating meetings, prompting data collection, reaching out to family members and community, and meeting regularly with the district coordinator and coaches from other schools (Sugai et al., 2010). This coaching network provides an important framework for ensuring data are collected, communicating with the district coordinator, and providing school teams with a way in which to access support when problems arise. *SWPBS coaches receive joint trainings and attend meetings with each other* throughout the year (Freeman, Lohrmann et al., 2009). An overall goal for the district is to align all professional development systems with MTSS using a layered approach that reflects the need for different types and intensity levels of training.

*Awareness-level training information* is used to introduce elements of MTSS to new school staff, administrators, family members, and the community. Introductory presentations can be videotaped and posted on a district website and Power Point presentations shared using websites to post information for widespread use. Districts can support school teams by offering general introductory information for all new staff transitioning into the district. In-service curriculum should include *skill-building opportunities* reflecting different areas of expertise in order to build internal capacity for MTSS and address natural attrition that occurs within schools. Individual school professionals in need of continuing education credits and other ongoing professional development can learn the skills necessary for interventions supporting students at secondary and tertiary prevention levels. The *skills for facilitating intensive and individualized academic and behavioral interventions* for students may require a smaller number of school staff members develop a high level of expertise to implement interventions in reading, math, or other academic areas, or to facilitate positive behavior support planning. *Academic and behavioral trainers* are needed within the district to lead professional development efforts occurring at each of the layers of training. Districts can support schools by *establishing curriculum for preparing school staff for key MTSS roles* including coach training, introductory information for new school staff joining academic and/or behavioral teams, and for participation in tiers two and three team processes. Technology support at the district level provides access to key data collection systems. The types of technology used will also require ongoing systems for training and technical assistance in order to *support school teams and the larger school faculty in learning how to utilize academic and behavioral data systems effectively over time*.

**District technology resources.** Districts establish MTSS data collection systems in different ways. In some districts, the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) serve as a universal screening in reading and math, as well as to monitor student progress over time (Dynamic Measurement Group, 2015). Training and technical assistance is needed to first establish certified trainers available to expand DIBELS across schools and to support ongoing data-based decision making of school staff on an ongoing basis. Another type of evaluation data includes visual summaries of office discipline referrals (ODRs)- written documentation that occurs when a student misbehaves. An external software program can be used to gather, and summarize school-wide ODR patterns and to provide school teams with continual access to visual summaries that are used for data-based decisions during meetings. One example of a software program that provides data for team-based decision making at all prevention tiers is referred to as the School-wide Information System (SWIS, 2015). The SWIS system provides schools with a way in which to organize and review ODRs, monitor a common tier two intervention referred to as Check in/Check out (Filter et al., 2007), and evaluate individual student problem behavior and positive social behavior at tier three (SWIS, 2015). Districts with technology personnel and resources may decide to design an internal data collection system that will be used within the district for data-based decision making. Data from different types of process and outcome evaluation tools discussed later in this article can be included in district systems to make school improvement information easier for teams to access and use during MTSS self-assessment and action-planning meetings.

A number of districts use websites to organize, promote, and share information about MTSS. A district-level website provides school teams with examples of school-wide expectations and other universal interventions, tools and resources for implementation, and strategies for integrating academic and behavioral MTSS used by exemplary school teams. District websites provide access to detailed MTSS policies and procedures defining fidelity of implementation at each tier and clearly articulating the district's vision and mission. Easy access to technology programs, tools and training materials, newsletters for family and community members, examples of implementation efforts, awareness materials, and a calendar of events are available from the main district website. The degree to which website and technology-based supports are used as tools for MTSS implementation will vary based on the strengths of each district (e.g. access to technology expertise, funding available for development and posting content online, etc.). In summary, the role of the district in systems change is to create an infrastructure for training and technical assistance. The next section of this article describes how implementation science is used to design and maintain a district training and technical assistance infrastructure.

### ***Integrating MTSS Efforts Using Implementation Science***

Fixsen, Naoom, Blasé, Friedman, and Wallace (2005) describe the stages of implementation that are commonly experienced by implementers of new practices such as MTSS. The ***exploration stage*** occurs when a district team has not yet started training and technical assistance and is still assessing the readiness of schools to move forward with an implementation effort. The ***installation stage*** involves the active selection of a new program, development of performance assessment processes, initial training efforts and securing of resources. The ***initial implementation stage*** reflects the early steps taken to introduce a new effort and often involves a learning curve as districts adjust and integrate new changes into daily work. ***Full implementation*** is achieved when over half of the school personnel targeted to change their practices do so with a high level of performance fidelity. Districts implementing MTSS may be experiencing different stages of implementation while implementing academic and behavioral interventions depending upon how the different tiered models were introduced.

### ***Competency, Organizational, and Leadership Drivers***

Fixsen, Blasé, Naoom, and Wallace (2009) identified core components that are commonly associated with successful implementation efforts irrespective of whether a project is implemented in education, mental health, juvenile justice, or any other human service setting. These core components are referred to as implementation drivers (Metz & Bartley, 2012). The three major drivers: competency, organization, and leadership, are used to outline the essential components as they relate to academic and behavioral MTSS.

### ***Competency Drivers***

Competency drivers are the activities, mechanisms, and resources that are needed to improve the necessary knowledge and skills of teachers and administrators implementing MTSS (Fixsen, Blasé, Naoom, & Van Dyke, 2010). The four competency drivers include selection, training, coaching, and performance assessment (see Table 1).



**Table 1. Examples of Implementation Drivers for Integrated MTSS Efforts**

Competency Drivers	
Performance Assessment (Fidelity of Implementation)	<ul style="list-style-type: none"> <li>• Fidelity self-assessment tools for teams</li> <li>• Observational tools to monitor performance</li> <li>• Formal evaluation processes (e.g., SET, BAT, SWET-R, ISSET, etc.)</li> </ul>
Selection	<ul style="list-style-type: none"> <li>• Selection of staff (coordinators, coaches, trainers, practitioners)</li> <li>• Readiness assessment tools and processes</li> <li>• Administrative buy-in and resource availability</li> </ul>
Training	<ul style="list-style-type: none"> <li>• Layered training systems for all roles</li> <li>• Building and maintaining internal expertise</li> <li>• Addressing attrition proactively</li> </ul>
Coaching	<ul style="list-style-type: none"> <li>• District coordinators</li> <li>• Internal and external coaching</li> <li>• Supporting stages of development and experience</li> </ul>
Organization Drivers	
System Intervention	<ul style="list-style-type: none"> <li>• Internal and external partnerships (e.g., mental health agencies)</li> <li>• Funding</li> <li>• Human resources and organizational systems</li> <li>• Alignment with shifting federal, state, district, community factors</li> </ul>
Facilitative Administration	<ul style="list-style-type: none"> <li>• Resource allocation for interventions</li> <li>• Infrastructure development (e.g., master schedule)</li> <li>• Barriers for successful implementation eliminated/reduced</li> </ul>
Decision Support Data Systems	<ul style="list-style-type: none"> <li>• Data used for decision making at all levels</li> <li>• Universal screening (e.g., DIBELS, SWIS, SSBD)</li> <li>• Diagnostics (e.g., FBA, DIBELS Deep)</li> <li>• Progress monitoring (e.g., DIBELS)</li> <li>• Process and outcome evaluation- all tiers</li> <li>• Self-assessment strategies for district/school improvement</li> </ul>
Leadership Drivers	
Technical	<ul style="list-style-type: none"> <li>• Traditional management and accountability skills</li> <li>• Integrated academic/behavior data reviews for problem solving</li> <li>• Formative evaluation with action planning</li> </ul>
Adaptive	<ul style="list-style-type: none"> <li>• Complex situations that are not easily identified or solved</li> <li>• Focus is on identifying sources of conflict resulting from diverse cultural views and opinions</li> <li>• Need for development of consensus building and group learning experiences</li> </ul>

Bertram et al., 2011; Fixsen et al., 2009; Metz & Bartley, 2012; NIRN, 2015

**Selection.** The different MTSS roles (district coordinator, coach, academic specialist) require a variety of skills and experiences. While some of these skills are taught as part of inservice training or provided in preservice preparation, other strengths may be inherent within a person's characteristics (problem solving, sensitivity to others, empathy, confidence speaking with peers). Some individuals will be well suited to become coaches while others may feel uncomfortable in this type of role. Larger systems issues related to selection include the extent to which funding is available to address the need for intensive and advanced academic and behavioral expertise (Fixsen et al., 2009). It is not uncommon to hear school professionals indicate that there is a need for behavioral expertise, reading specialists, etc. Districts will invest in a significant amount of training for professionals making selection issues such as willingness, commitment, and the possibility of attrition key considerations.

In fact, staff selection involves assessment of different levels and types of commitment to MTSS. District readiness assessments are used by trainers before beginning MTSS to evaluate administrator commitment and assess whether a core group of leaders within the district understand that systems change will require a long-term commitment of time and resources (Handler et al., 2007). When schools apply to participate in MTSS, tools are also used to evaluate school administrator buy-in, school faculty interest in implementation, and resources that are available for implementation (George & Kincaid, 2008). The commitment to MTSS implementation by the school administrator is believed to be a key success factor for systems change (Fullan, 2005; Sindelar, Shearer, Yendol-Hoppey, & Liebert, 2006).

**Training.** Training opportunities are designed to promote the knowledge and skills aligned with MTSS. Successful implementation of MTSS requires behavior change of school faculty, staff, administrators, coaches, and other individuals involved in implementation efforts (Bertram, Blasé, Shern, Shea, & Fixsen, 2011). The different layers of MTSS training described earlier address each person's role within MTSS and ensure internal capacity building occurs. Introductory and team-based training, coaching and mentoring provided to school staff members who support team-based action planning, and higher level training and capacity building to establish academic and behavioral expertise at tiers two and three are included in the overall training plans. A central theme in training is the use of data as part of an ongoing cycle of improvement and the development of increasingly intense levels of support.

**Coaching.** New information can be shared in workshops and training events to improve conceptual knowledge and understanding. School faculty need coaching systems to take the next step in applying conceptual knowledge by actively employing new skills, engaging in reflective dialogue with someone with experience using new strategies, and embedding these skills into everyday practice (Joyce & Showers, 2002). Coaching is used to support a number of roles in MTSS including: individuals selected as coaches working with school teams, district coordinators, team members implementing MTSS, professionals learning to facilitate specific academic expertise in reading math, and other areas at tiers two and three, and individuals facilitating and coordinating targeted and individualized positive behavior support.

**Performance assessment.** Performance assessment is used to evaluate the fidelity of implementation practices that occur in MTSS. These fidelity of implementation assessments evaluate the degree to which school buildings are able to imple-



ment academic RtI, SWPBS, or an integrated combination of MTSS. Trainers use an array of tools to assess fidelity of implementation. These tools range from team self-assessments, walk-through observation tools, and performance evaluations that are conducted by teams internal and external to each school. The Schoolwide Evaluation Tool (Horner et al., 2004), the Benchmarks of Quality (BoQ) (Kincaid, Childs, & George, 2005), the Benchmarks of Advanced Tiers (BAT) (Anderson et al., 2009) and the Independent Student Systems Evaluation Tool (ISSET) (Anderson et al., 2009) are used to evaluate the performance of schools at different tiers. A new tool, the Systemwide Evaluation Tool for Reading (SWET-R), was developed by trainers in one state to evaluate the strength of Tier I implementation related to literacy practices (Martin, Huth, & Harms, 2013). Feedback from these evaluation methods helps to inform future action plans and intervention efforts.

### **Organization Drivers**

Organization drivers are the core building blocks that assist district teams in establishing an infrastructure that is needed to support practice and implement systems change (Metz & Bartley, 2012). These building blocks are used to provide consistent monitoring and feedback communication loops for the sharing information in a transparent manner (Bertram et al., 2011). There are three organization drivers including decision-support data systems, facilitative administration, and systems interventions.

**Decision-support data systems.** The MTSS problem-solving process is based on the availability of reliable, current data that are accessible at the classroom, building, and district level. Schools rely on data management systems to collect and summarize data for decision making purposes. Examples mentioned earlier in this article include DIBELS for academics and the School-wide Information System, or SWIS, for behavior (SWIS, 2015). Data are reviewed by school teams at least monthly for all students using a standardized problem-solving process in conjunction with cut points and/or benchmarks to determine responsiveness to tier one supports and to identify students in need of targeted or individual support. Similarly, the data are reviewed on a more frequent cycle to determine responsiveness to interventions at tier two and three.

SWPBS, data including ODRs, suspensions, and other data sources (e.g. Schoolwide Information System; SWIS, 2015), the Systematic Screening of Behavior Disorders (SSBD) (Walker, Severson & Feil, 2012), and the Classroom Check-up (CCU) (Reinke, Herman, & Sprick, 2011) are used to assess the effectiveness of the existing behavior systems and instruction as well as to identify student needs. At the tier two level, data are collected for targeted interventions, such as Check-In and Check-Out (Filter, et al., 2007), Check and Connect (Christenson et al., 2008) and social skill instruction. At tier three, individual student data gathered as a baseline during functional behavioral assessment and intervention outcome data are used for decision making (for more information about tier 3 behavioral interventions, please refer to Brown, Anderson, & De Pry, 2015).

**Facilitative administration.** Facilitative administration drives the implementation process keeping staff organized and focused on targeted outcomes (Fixsen et al., 2009). The school principal can be instrumental in allowing systems changes

such as altering existing procedures and providing time for grade level or student intervention teams to meet and review data and engage in problem solving. The principal, the internal coach, and other individuals providing intensive facilitation of academic and behavioral strategies at tiers two and three create part of the infrastructure necessary to support the work of the leadership team and school personnel. Resources are directed to coaching or training systems when issues arise in order to maintain effective implementation. In summary, facilitative administration refers to the actions taken by implementers to ensure MTSS systems are working effectively and feedback communication loops are used to identify problems and improve the training infrastructure.

**Systems interventions.** Changes and shifts within federal, state, districts, and community agencies can impact culture, policies and political environments in which MTSS is implemented (NIRN, 2015). Systems interventions involve establishing partnerships within the immediate and broader systems in order to acquire the external funds, human resources, and organizational systems needed to support MTSS (Metz, Blasé, & Bowie, 2007). For instance implementation efforts may include the active involvement of local mental health professionals at all three tiers. A district team may learn that state funding cutbacks have occurred making it more difficult for the local mental health center to participate in MTSS. Systems interventions will be needed to adjust to these changes in funding and to address the constantly shifting political and cultural environment within the state.

In some cases, systems interventions are used to continue expanding MTSS implementation. The absence of district level leadership in MTSS can be problematic when schools are independently implementing tiered models for reading and/or behavior. Specific policies, procedures and regulations may exist within the district that serve as barriers to effective implementation at the building level. In this situation, school teams within the district may engage in a systems intervention by working together to create plans for meeting with district personnel to share related data, describe progress being made, and encourage adoption of district-wide MTSS. Once these meetings are completed, the teams may present to the education board in order to start increasing awareness and political support for MTSS.

### **Leadership Drivers**

Heifetz and Laurie (1997) refer to *technical challenges* and *adaptive challenges* that emerge when transforming systems and creating change. These two types of drivers address different types of problem solving that leaders use in systems change. It is important to distinguish between the two in order to provide the right type of leadership strategy when problem solving at the district level.

**Technical challenges.** Technical challenges are more easily identified and can be ameliorated with active facilitation of the essential elements of MTSS. For example, when performance assessments indicate deficits that are apparent within MTSS implementation efforts, the leadership team can develop and execute an action plan to address these challenges. When technical challenges are encountered, the problem can be defined without ambiguity and there is a clear path to the solution.

**Adaptive challenges.** Adaptive challenges may be more difficult to recognize and are typically *not* resolved through traditional approaches. An issue re-

quiring adaptive leadership strategies occurs when a district encounters resistance to implement MTSS from individuals within a school. Resistance can emerge when staff members are asked to change the way they are doing things or to take on new responsibilities. Adaptive leadership involves reaching out to these faculty members, acknowledging the discomfort brought on by change, and working through the issues together to resolve problems. Once a leader has improved the climate and faculty are ready to take on new changes, technical solutions are employed in order to move forward.

One of the goals within systems change is to establish a culture that supports MTSS implementation where technical leadership challenges are more common because individuals within a system share a common vision and culture of change. Effective leaders must be able to identify whether challenges that arise require technical or adaptive leadership strategies. One of the more common mistakes made by leaders facilitating systems change is to apply technical leadership skills under conditions that require adaptive leadership (Heifetz & Laurie, 1997).

### ***Integrating MTSS Efforts***

There are two important types of integration that must be considered as districts implement MTSS. The first type of integration involves the implementation of organization, competency, and leadership drivers (Fixsen et al., 2009). The second type of integration was mentioned earlier as part of the discussion related to aligning RtI academic interventions and SWPBS.

**Integrating drivers.** The core implementation drivers described by Fixsen and his colleagues must be considered within the context of complex and ever-changing variables common in districts and schools. Challenges arise when district and school teams allow implementation drivers to occur in isolation (NIRN, 201). Two important communication systems, or feedback loops, include staff performance evaluation and decision-support data systems. Attention to feedback communication loops help district teams evaluate important information that, when used to make modifications and adjustments, help to keep MTSS efforts integrated (Fixsen et al., 2009). For instance, a team may become aware from performance assessments that school personnel are struggling to master certain elements of a new reading intervention. This information is used to improve the team-based training curriculum related to reading. However, the change made to the curriculum may require modifications be made to a performance assessment tool in order to evaluate new skills added to the training. Disagreements occurring among implementers about altering the performance assessment tool may require adaptive leadership strategies be used in order to reach consensus and resolution. District leaders will engage in further dialogue and group learning processes to assist those involved in implementation efforts to better understand why changes in data systems are needed.

**Integrating MTSS models.** The same type of isolation and fragmentation that occurs when drivers are not integrated is apparent when RtI academic models and SWPBS are implemented without careful attention to alignment and integration. Implementation can become fragmented when academic and behavioral MTSS teams or trainers are not communicating. Over time, the benefits of both tiered models will be diminished. Allocation of training and staff time may be used for redun-

dant purposes when a more integrated approach could be used to teach key MTSS skills. Conflict among implementers can arise requiring adaptive leadership due to perceived competition over limited MTSS resources.

District teams that start integrating academic and behavioral efforts can do so at any phase of implementation. Teams that do begin integrating MTSS efforts early have more time and opportunity to try new strategies and build on implementation efforts. Fixsen, Blasé, Naoom, and Duda (2013) have recently shared an implementation drivers assessment tool that includes a case study example of data collected from three school districts implementing MTSS. The assessment was completed by individuals who were directly involved in managing the implementation efforts within each district. The information was gathered using the drivers assessment tool. This assessment provides a way for district teams to assess the perceptions of different individuals involved in MTSS. Teams can utilize these data by integrating review processes within communication feedback loops that have been established as part of organization and competency drivers (e.g. meetings to review data for decision making and performance assessments at different levels in the district and in schools). This type of tool can be helpful as a part of the district leadership evaluation process and when shared with implementers to facilitate further integration of MTSS.

## CONCLUSION

School teams implementing MTSS independently without district-level support may encounter barriers that make it more difficult to achieve significant and lasting change (Handler et al., 2007). District leadership can contribute to the sustained MTSS practices of its schools by establishing a training and technical assistance infrastructure, providing schools with access to data-based decision making systems, creating communication feedback systems for sharing information, and articulating a consensus-based vision and mission for MTSS. The implementation science framework described by Fixsen and his colleagues (2009) provides district teams with guidelines for integrating tiered implementation models and a problem-solving system that can be used to expand MTSS as other evidence-based practices are adopted.

## REFERENCES

- Anderson, C., Childs, K., Kincaid, D., Horner, R. H., George, H. P., Todd, A. W., & Spaulding, S. (2009). *Benchmarks for advanced tiers*. Eugene, OR: Educational and Community Supports, University of Oregon.
- Batsche, G. M., Elliot, J., Garden, J., Grimes, J., Kovaleski, J. F., Prasse, D., & Tilly III, W. D. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: National Association of State Directors of Special Education, Inc.
- Bertram, R., Blasé, K., Shern, D., Shea, P., & Fixsen, D. (2011). *Policy research brief: Implementation opportunities and challenges for prevention and promotion initiatives*. Alexandria, VA: National Association of State Mental Health Program Directors.
- Brown, F., Anderson, J. L., & De Pry, R. L. (2015). *Individual positive behavior supports: A standards-based guide to practices in school and community settings*. MD: Brookes.
- Christenson, S. L., Thurlow, M. L., Sinclair, M. F., Lehr, C. A., Kaibel, C. M., Reschly, A. L., Mavis, A., & Pohl, A. (2008). *Check & Connect: A comprehensive student engagement intervention manual*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

- Dynamic Measurement Group (2015). *Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and DIBELS Math*. Retrieved December 8, 2014: <https://dibels.org/>.
- Elliott, J. & Morrison, D. (2008). *Response to intervention blueprints: District level edition*. Alexandria, VA: National Association for State Directors of Special Education.
- Filter, K. J., McKenna, M. K., Benedict, E. A., Horner, R. H., Todd, A., & Watson, J. (2007). Check in/check out: A post-hoc evaluation of an efficient, secondary-level targeted intervention for reducing problem behaviors in schools. *Education and Treatment of Children, 30*, 69-84.
- Fixsen, D. L., Blase, K. A., Naoom, S. F., & Duda, M. (2013). *Implementation drivers: Assessing best practices*. National Implementation Science Network (NIRN). Chapel Hill, NC: Frank Porter Graham Child Development Institute. University of North Carolina Chapel Hill.
- Fixsen, D., Blase, K., Naoom, S., & Van Dyke, M. (2010). *Stage-based measures of implementation components*. Retrieved from [http://www2.oregonrti.org/files/u9/2%20NIRN%202010\\_Stage-Based%20Measures%20of%20Implementation.pdf](http://www2.oregonrti.org/files/u9/2%20NIRN%202010_Stage-Based%20Measures%20of%20Implementation.pdf)
- Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core implementation components. *Research on Social Work Practice, 19*, 531-540.
- Fixsen, D. L., Naoom, S. F., Blasé, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. University of South Florida. Tampa, Florida.
- Freeman, R., Lohrmann, S., Irvin, L. K., Kincaid, D., Vossler, V., & Ferro, J. (2009). Systems change and the complementary roles of inservice and preservice training in school-wide positive behavior support. In G. Sugai, R. Horner, G. Dunlap, & W. Sailor (Eds.), *Handbook of positive behavior support* (pp. 599-626). Secaucus, NJ: Springer.
- Freeman, R., Perrin, N., Irvin, L., Vincent, C., Newcomer, L., & Farr Bond, K. (2009). *Positive behavior support across the lifespan: Expanding the concept of statewide planning for large-scale organizational cultural change* (PBS-Kansas Monograph No. 1). Lawrence, KS: University of Kansas, Schiefelbusch Institute for Lifespan Studies.
- Fullan, M. (2005). *Leadership and sustainability: System thinkers in action*. Thousand Oaks, CA: Corwin Press.
- George, J. P., & Kincaid, D. K. (2008). Building district-level capacity for positive behavior support. *Journal of Positive Behavioral Interventions, 10*, 20-32. DOI: 10.1177/1098300707311367
- Handler, M. W., Rey, J., Connell, J., Thier, K., Feinberg, A., & Putnam, R. (2007). Practical considerations in creating school-wide positive behavior support in public schools. *Psychology in Schools, 44*, 29-39.
- Hawken, L. S., Vincent, C. G., & Schumann, J. (2008). Response to intervention for social behavior: Challenges and opportunities. *Journal of Emotional and Behavioral Disorders, 16*, 213-225.
- Heifetz, R.A., & Laurie, D.L., (1997). The work of leadership. *Harvard Business Review, 75*, 124-134.
- Horner, R. H., Todd, A. W., Lewis-Palmer, T., Irvin, L. K., Sugai, G., & Boland, J. B. (2004). The school-wide evaluation tool (SET): A research instrument for assessing school-wide positive behavior support. *Journal of Positive Behavior Interventions, 6*, 3-12. doi:10.1177/10983007040060010201
- Joyce, B., & Showers, B. (2002). *Student achievement through staff development (3rd ed.)*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kincaid, D., Childs, K., & George, H. (2005). *School-wide benchmarks of quality*. Unpublished instrument, University of South Florida.
- Kurns, S. & Tilly, W.D. (2008). *Response to intervention blueprints: School building level edition*. Alexandria, VA: National Association for State Directors of Special Education.

- Lane, K. L., Menzies, H. M., Ennis, R. P., & Bezdek, J. (2013). School-wide systems to promote positive behaviors and facilitate instruction. *Journal of Curriculum and Instruction*, 7, 6-31.
- Lane, K. L., Oakes, W. P., & Menzies, H. M. (2010). Systematic screenings to prevent the development of learning and behavior problems: Considerations for practitioners, researchers, and policy makers. *Journal of Disabilities Policy Studies*, 21, 160-172
- Martin, S., Huth, E., & Harms, A. (2013). *School-wide evaluation tool for reading (SWET-R)*. Michigan Department of Education.
- McIntosh, K. & Goodman, S. (in press). *Multi-tiered systems of support: Integrating academic RTI and school-wide PBIS*. New York: Guilford Press.
- McIntosh, K., Horner, R. H., Chard, D. J., Boland, J. B., & Good, R. H. (2006). The use of reading and behavior screening measures to predict nonresponse to school-wide positive behavior support: A longitudinal analysis. *School Psychology Review*, 35, 275-291.
- Metz, A., & Bartley, L. (2012). Active implementation frameworks for program success: How to use implementation science to improve outcomes for children. *Zero to Three*, 32, 11-18.
- Metz, A.J.R., Blase, K., & Bowie, L. (2007). *Implementing evidence-based practices: Six drivers of success*. Washington, DC: Child Trends.
- National Implementation Research Network (2015). *Systems intervention*. Retrieved January 2, 2015: <http://nirn.fpg.unc.edu>
- Reinke, W. M., Herman, K. C., & Sprick, R. S. (2011). *Motivational interviewing for effective classroom management: The classroom check-up*. Guilford Press.
- Sindelar, P., Shearer, D., Yendol-Hoppey, D., & Liebert, T. (2006). The sustainability of inclusive school reform. *Exceptional Children*, 72, 317-331.
- Stewart, R. M., Benner, G. J., Martella, R. C., & Marchand-Martella, N. E. (2007). Three-tier models of reading and behavior: A research review, *Journal of Positive Behavior Interventions*, 9, 239-253. DOI: 10.1177/10983007070090040601
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and School-Wide Positive Behavior Supports: Integration of multi-tiered system approaches. *Exceptionality*, 17, 223-237.
- Sugai, G., Horner, R. H., Algozzine, R., Barrett, S., Lewis, T., Anderson, C., . . . Simonsen, B. (2010). *School-wide positive behavior support: Implementers' blueprint and self-assessment*. Eugene, OR: University of Oregon.
- SWIS (2015). *School-wide Information System*. Retrieved January 4, 2015, 2014: [www.pbisapps.org](http://www.pbisapps.org)
- Utley, C. A., & Obiakier, F. E. (2012). Response to intervention and positive behavior interventions and supports: Merging models to improve academic and behavioral outcomes of culturally linguistically diverse children with learning disabilities. *Insights on Learning Disabilities*, 9, 37-67.
- Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). *Antisocial behavior in school: Evidence-based practices* (2nd ed.). Belmont, CA: Wadsworth.
- Walker, H., Severson, H., & Feil, E. (2012) *Systematic Screening of Behavior Disorders (2nd Edition)*. Eugene, OR: Pacific Northwest Publishing.
- World Health Organization (2004). *Prevention of mental disorders: Effective interventions and policy options*. Geneva: WHO.

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