

Promoting Social and Behavioral Success for Learning in Elementary Schools

Practice Recommendations for Elementary School Educators, School and District Administrators, and Parents

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PRACTICE RECOMMENDATIONS FOR ELEMENTARY SCHOOL EDUCATORS, SCHOOL AND DISTRICT ADMINISTRATORS, AND PARENTS

March 2022

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Introduction

In recent decades, research and practice have shown that investing in a positive school-wide social culture is a key component of effective education. Evidence demonstrates that educators and students succeed when students are present, engaged, socially secure, and academically successful. Furthermore, the documented negative effects of student problem behavior¹ (both short-term and long-term) have prompted significant new efforts in prevention and remediation. Student behaviors that disrupt or detract from classroom learning can result in fewer learning opportunities for students, impaired relationships between students and teachers, deteriorating classroom and school environments, and decreased likelihood of academic success.

An estimated 10 to 33 percent of students exhibit disruptive behaviors that are difficult for teachers to manage and that subsequently interfere with the ability of all students in a classroom to fully engage in instructional activities. Without sufficient support, initial training, and coaching, teachers may be inclined to use punishment-based procedures, such as seclusion or exclusion, to manage disruptive behaviors. However, empirical research demonstrates that these punishment procedures, on their own, are ineffective at reducing problem behavior over the long term⁴ and undermine student-teacher relationships. Furthermore, responding to problem behaviors with solely punitive approaches inhibits students from engaging in learning as well as learning how to positively change their behavior. Compelling evidence also demonstrates the disproportionate use of punitive approaches with students of color, further contributing to academic and disciplinary opportunity gaps.

Over the past two-and-a-half decades, policy developments, practical experience, and research have increasingly revealed the importance of investing in prevention, teaching prosocial and positive behavior, and reducing the rewards for problem behavior as approaches for both decreasing problem behavior and promoting prosocial and positive behavior among all students. Many schools and districts are implementing strategies or frameworks that focus on prevention and instructional practices to identify and support prosocial behavior. These practices typically involve stating expectations for behavior in a positive manner; clearly and openly teaching, modeling, and reinforcing these expectations; and using data to monitor and measure the effectiveness of these practices and adjusting the practice, if necessary. Although

these practices were originally intended for use at the student level, there is increasing interest in adopting systems-level prevention and tiered approaches or frameworks that encourage appropriate behavior at the whole-class or whole-school level and increase the likelihood of effective teaching and learning for all students. Prosocial and positive behavior (hereafter referred to as "prosocial behavior") refers to students' observable actions and interactions that promote academic and/or social success for students, peers, and educators. For example, prosocial behavior may consist of students following classroom rules and expectations, self-regulating their behavior, playing or working cooperatively, and attending to instruction.

Developed by 2M Research in conjunction with an expert panel and informed by a review of evidence using What Works Clearinghouse (WWC) evidence standards, these practice recommendations for educators draw upon studies of whole-school or whole-class interventions¹¹ that support prosocial behavior in elementary school students, including students who are identified as having disabilities or who are at risk of identification for special education services. Moreover, these recommendations are based on research on promising interventions that show evidence of improved outcomes for student behavior, educator classroom management, and school environment. The panel offers elementary educators, administrators, qualified related service providers, and qualified school-based mental health practitioners¹² five specific recommendations for prevention-focused practices that promote prosocial student behavior and related outcomes (see **Table 1** below).

Who Might Find These Recommendations Useful?

These recommendations are designed to be used by educators, administrators, related service providers, school-based mental health practitioners, and parents to promote prosocial behavior in elementary students. These audiences can use the recommendations to identify and implement whole-school or whole-class prevention-focused strategies that support prosocial behavior among students, support changes in instructional and discipline practices, and improve the climate and equity of school and classroom environments. Practitioners may also find the recommendations helpful for identifying whole-school or whole-class practices that are particularly effective for supporting students with disabilities or students who are at risk for special education services and may need more intense support. Further, the recommendations may be of interest to administrators who wish to implement, at the

district or state levels, the organizational systems and supports necessary for accurate and sustained implementation of prosocial behavior practices across elementary schools.

Finally, the evidence supporting the recommendations has the potential to promote conversations among researchers about the availability of rigorous research on best practices related to prosocial behavior strategies, as well as conversations about research gaps that should be addressed.

Using Evidence to Develop the Recommendations

The panel's recommendations add to the existing body of literature and a previous WWC practice guide on classroom behavior management¹⁴ by synthesizing the evidence supporting five recommendations on whole-school or whole-class practices to promote prosocial behavior in elementary schools. Each recommendation includes examples of strategies and how to implement them, guidance on how to overcome potential obstacles, and a summary of the research evidence that supports the recommendation.

2M, in conjunction with the expert panel, created a systematic review protocol to guide the evidence search and review.¹⁵ WWC-certified reviewers summarized findings from eligible studies (see **Box 1**) that met the protocol's evidence standards for consideration by the expert panel. Figure B.1 of Appendix B summarizes the number of studies identified, screened, and reviewed under the protocol.

There is a marked distinction between proximal and distal outcomes, as well as how these outcomes informed the practice recommendations. Outcomes in student behavior, educator disciplinary and

Box 1. Study Eligibility Criteria

- Employed a comparison group design
- Included non-commercial, whole-school, or whole-class interventions seeking to promote prosocial behavior within elementary schools
- Published in 2007 or later
- Reported on one or more outcomes in the following domains:

1. Student Outcomes:

Student Engagement in School. Compliant Student Behavior. Student Social Emotional Functioning. Primary School Academic Achievement. General Literacy Achievement. General Mathematics Achievement.

2. Educator Outcomes:

Educator Discipline Practice. Educator Instructional Practice.

3. School Environment Outcomes:

Classroom and School Climate. Classroom and School Equity.

instructional practices, and school environment domains were designated as *proximal outcomes* on the basis that behavioral interventions would be most likely to directly

affect these outcomes over a shorter time period, as is the case in the studies reviewed for this guide. In contrast, academic achievement outcomes (including outcomes in domains of primary school academic achievement, general literacy achievement, and general mathematics achievement) were characterized as *distal outcomes* on the basis that behavioral interventions would be less likely to directly affect these outcomes in the short term but may affect these outcomes over time. Accordingly, the expert panel focused primarily on proximal outcomes for student behavior and educator disciplinary and instructional practices, as well as for the school environment, to develop the evidence ratings associated with each recommendation. Thus, the panel designated academic achievement outcomes as a secondary focus. Additional details on how these outcomes informed the reviews can be found in **Appendix B**, and information on how the outcomes informed the evidence ratings is provided in **Appendix C**.

This guide draws on studies of whole-school or whole-class interventions to support prosocial behavior by elementary school students, including students who are identified as having disabilities or who are at risk of identification for special education services. The practice recommendations were informed by research on promising interventions with evidence of improved outcomes for students, educators, and school environments.

The five recommendations from the panel are shown in **Table 1**, below.

TABLE 1: Practice Recommendations

Practice Recommendations

Recommendation 1. Implement school-wide procedures for defining, teaching, and acknowledging a small set (e.g., 3-5) of positive behavioral expectations.

Recommendation 2. Implement school-wide procedures to ensure that consequences for problem behavior (a) prevent escalation, (b) interrupt and/or redirect problem behavior to expected behavior, and (c) minimize inadvertently rewarding problem behavior.

Recommendation 3. Use coaching to support implementation of evidence-based instructional and classroom management strategies.

Recommendation 4. Collect, summarize, and use fidelity and student outcome data at all levels for iterative decision-making and problem-solving by stakeholders.

Recommendation 5. Implement the organizational systems needed to support the initial adoption and sustained use of effective practices with high fidelity.

The guide references specific interventions examined in the seven studies that were assessed as meeting WWC evidence standards and provided the evidence to inform the practice recommendations (see **Table 2**). Readers can refer to this table for an overview of these interventions. **Recommendations 1 and 2** are supported by five studies. **Recommendation 3** is supported by three studies; **Recommendation 4** is supported by five studies; and **Recommendation 5** is supported by two studies. The number of study participants ranged from 24 to 859 schools or 89 to 158 teachers. Although these studies were assessed as meeting WWC evidence standards and informed the evidence-based recommendations in this guide, it is essential for readers to know that the authors do not endorse any specific brand-name or named interventions or practices featured in the studies.

TABLE 2: Overview of Studies Informing Practice Recommendations

T44:	C4 1	# - f Ol	Recommendation					
Intervention	Study	# of Observations		2	3	4	5	
Double Check	Bradshaw et al. (2018)	158 teachers			•	•		
Responsive Classroom	Ottmar et al. (2013) Additional sources: Rimm-Kaufman et al. (2014)	24 schools	•	•				
School-wide Attendance and Truancy Intervention	Berg (2018)	27 schools	•	•				
School-wide Positive Behavior Interventions and Supports (SWPBIS)	Bradshaw et al. (2010) Additional sources: Bradshaw et al. (2012) Bradshaw et al. (2015)	37 schools	•	•		•	•	
SWPBIS	Pas et al. (2019)	859 schools	•	•		•	•	
Teacher Coaching and Formative Assessment	Fabiano et al. (2018)	89 teachers			•	•		
Team-Initiated Problem-Solving (TIPS)	Horner et al. (2018)	38 schools	•	•	•	•		

Overarching Themes

In developing the practice recommendations, the expert panel identified five overarching themes that cut across the recommendations that are outlined in this guide (see **Table 3**). These themes represent important issues or factors to consider when developing and implementing practices to promote prosocial behavior in elementary schools. The five themes are as follows:

TABLE 3: Overarching Themes

Overarching Themes

Theme 1. Address educational inequities through a multifaceted approach to implementing culturally responsive practices.

Theme 2. Focus on promoting a positive school-wide social culture by investing in authentic student, teacher, and family relationships.

Theme 3. Foster authentic relationships with students and families through concerted efforts to understand all parties' diverse perspectives and experiences on school culture.

Theme 4. Focus on equity by using culturally sensitive and responsive practices and by adapting evidence-based behavioral and instructional support practices to fit the social culture of the school.

Theme 5. Obtain buy-in from different stakeholders, including the principals, educators, and support staff.

Theme 1: Address educational inequities through a multifaceted approach to implementing culturally responsive practices.

A multifaceted approach to culturally responsive practices involves holding high expectations for all students, using a student's culture and experiences to enhance their learning, and providing access to effective instruction and learning resources. Because single events or disconnected initiatives are unlikely to produce effective responses, the inclusion of explicit equity goals in school action plans can help guide efforts to address equity issues comprehensively. School action plans and policies should provide clear definitions and disciplinary procedures, replace punitive practices with instructional responses for addressing problem behavior, and include accountability for improving outcomes. Data offer an invaluable tool for examining equity issues within a multifaceted approach by providing an opportunity to measure the extent to which schools are operating within an equitable structure. Robust approaches to examining equity data involve identifying an existing team to examine disproportionality within discipline data and develop equity reports that monitor progress across various populations regularly.

Professional development of educators is another key component to addressing educational inequities within a multifaceted approach. Professional development involves initial training and ongoing coaching (Recommendation 3), which can be used to increase the use of culturally responsive practices that focus on cultivating student connections to curriculum, developing authentic relationships, adopting reflective thinking, engaging in effective communications, and acknowledging individual student cultures.¹⁷ Furthermore, training on the theory of implicit bias in education, and coaching focused on behaviors associated with implicit bias, can improve educators' implementation of effective strategies for increasing equity of school discipline and special education referrals. 18 Professional development can also assist educators in neutralizing their implicit biases by identifying specific discipline situations that are more prone to implicit bias and by adopting strategies for responding in accordance with their values. It is important to acknowledge that onetime trainings are insufficient to disrupt implicit biases and foster cultural sensitivity. Instead, cultural sensitivity in educators requires their ongoing self-reflection, willingness to have difficult conversions with colleagues to improve practices, and deliberate actions to unearth and dismantle biases.

The panel highlights the need for a multifaceted approach to implementing culturally responsive practices. This approach combines data systems for examining equity issues (**Recommendation 4**) with culturally responsive practices for addressing problem behaviors (**Recommendation 2**), and this approach integrates the implementation of organizational systems needed to support adoption and sustained use of culturally responsive practices with fidelity (**Recommendations 3 & 5**).

Theme 2: Focus on promoting a positive school-wide social culture by investing in authentic student, teacher, and family¹⁹ relationships.

A positive school-wide social culture reflects common values, beliefs, and expectations for behavior that create a school environment that is predictable, consistent, positive and safe for students, families, and educators. Developing positive and authentic relationships among educators, students, and families is a key component of building and sustaining a positive school-wide social culture. However, developing authentic relationships can be a challenging endeavor. It may require school personnel to invest substantial time and effort in forming relationships that

promote collaboration and problem-solving with students and families from a wide variety of backgrounds. Positive relationships arise from²⁰

- 1) clearly defined and commonly held values,
- 2) specific expectations defining appropriate and problem behavior for ALL involved,
- 3) a history of behavioral consistency with values/expectations (for example, people doing what they say they will do), and
- 4) a pattern in which the frequency of positive interactions exceeds the frequency of aversive interactions.

Guidance is provided on promoting a positive school-wide culture by investing in authentic and positive relationships as integral to implementing school-wide procedures for behavioral expectations (**Recommendation 1**) and by investing in consequences for problem behavior (**Recommendation 2**).

Theme 3: Foster authentic relationships with students and families through concerted efforts to understand all parties' diverse perspectives and experiences on school culture.

Brief, reliable, and validated tools such as the <u>U.S. Department of Education's School</u> <u>Climate Surveys</u> can be used to measure student, teacher, administrator, and family perceptions of school climate; such measurements can inform subsequent approaches to building positive relationships that support a collaborative approach to preventing behavior problems.²¹ Approaches to developing and strengthening student-teacher relationships may consist of instructional practices designed to increase learning opportunities and positive interactions²² with students who have or are at risk of emotional or behavior disorders²³ or to develop emotionally supportive classroom relationships that support students in developing prosocial skills, cooperating with their peers, and recognizing that their teachers and peers care about them.²⁴ Such relationships may be especially important for students of color and may help to foster a more supportive learning environment.²⁵ Peer relationships among students can be strengthened through group formats and other methods that provide an opportunity for students to practice new skills with their peers such as cooperation, collaboration, problem-solving, perspective-taking, play skills, and emotional literacy.²⁶ Finally, the development of strong family-school relationships requires treating family members

as equal partners in the decision-making, planning, and implementation of positive school-wide social cultural practices.²⁷ Culturally responsive practices paired with multidirectional communication are pivotal in supporting and empowering family members to engage as equal partners in education.²⁸

The panel provided guidance on understanding diverse perspectives on school culture by establishing multidisciplinary problem-solving teams that incorporate multiple perspectives (**Recommendation 1 and 2**) and by forming district or state leadership teams responsible for engaging diverse stakeholders (**Recommendation 5**).

Theme 4: Focus on equity by using culturally sensitive and responsive practices and by adapting evidence-based behavioral and instructional support practices to fit the social culture of the school.

Educational systems cannot be considered adequate until they are effective for all student populations,²⁹ and equity-focused practices are an integral part of efforts to promote prosocial behavior. Educational equity is characterized as policies, practices, interactions, and resources that are representative of, constructed by, and responsive to all students so that each individual has access to and can meaningfully participate in high-quality learning experiences.³⁰

When focusing on equity, it is important to consider that equity issues may manifest in several ways. For students who are not from a dominant culture, school environments may impart unintentional slights that devalue the student's background and impair school connectedness. ³¹ Although student populations are becoming increasingly diverse, only 21 percent of the teaching workforce in U.S. public schools are people of color. ³² Few teachers are well-equipped to bridge cultural differences and implement culturally responsive and unbiased classroom practices independently. ³³ Furthermore, implicit biases, or the unconscious attitudes and stereotypes that may affect understandings, actions, and decision-making, can adversely impact the equity in how educators perceive and respond to behavioral problems. ³⁴ Finally, disproportionality in school discipline is an enduring issue in which office discipline referrals, suspensions, and other forms of exclusionary discipline are disproportionately administered based on certain student characteristics, such as race/ethnicity or special education status. This

disproportionate use of exclusionary discipline subsequently increases these students' risk of academic failure, referrals to special education, and school dropout.

The panel brings attention to the need for focusing on equity and using culturally sensitive and responsive practices by leveraging cultural knowledge and norms to inform behavioral expectations (**Recommendation 1**), recognizing implicit biases and the need to implement school-wide procedures for teaching behavioral expectations and addressing problem behaviors in an equitable manner (**Recommendation 2**), and using coaching to assist teams with systematically implementing culturally responsive practices to enhance equity in school discipline practices (**Recommendation 3**).

Theme 5: Obtain buy-in from different stakeholders, including the principals, educators, and support staff.

Adopting whole-school or whole-class practices for promoting prosocial behavior depends on contextual factors³⁵ at the individual, school, and macro levels (e.g., federal, state, and district policies). Obtaining commitment and buy-in from multiple stakeholders, such as administrators, educators, and support staff is a critical contextual factor that can foster or inhibit initial implementation processes and significantly impact the implementation quality of school-based interventions. Indeed, staff buy-in has been identified as a prominent barrier,³⁶ with acceptance and commitment³⁷ as key factors affecting both initial implementation and long-term sustainability.³⁸ Factors that can help secure buy-in include (1) building consensus that a need exists; (2) selecting practices with evidence-based effectiveness; and (3) demonstrating that the practices are feasible and can be implemented by most individuals under typical conditions and with reasonable resources. Practices that are time efficient address an identified gap in existing services, and practices that meet the diverse needs of all students are more likely to be seen as acceptable and generate subsequent buy-in.³⁹

Research has shown that support and buy-in from administrators at both the school and district level is one of the most important factors for the success of both initial implementation and sustainability. ⁴⁰ Administrative support signals to school staff that implementation will be supported by allocating the requisite resources (e.g., time, training, and incentives), communicating the associated expectations, and addressing

practices that may compete for resources. ⁴¹Administrators can help secure broad buyin by actively supporting whole-school or whole-class prosocial practices, regularly attending and participating in team meetings, empowering teams to implement prosocial practices effectively and use data for decision-making, and routinely communicating that prosocial practices are a top priority. ⁴²

Several tools and processes can encourage stakeholder buy-in by aiding with decisions about which practices to adopt and decisions about which practices demonstrate their utility at an early stage. Planning and implementation tools⁴³ can be used to guide practice selection and evaluation through assessment of the associated evidence, supports, and usability alongside simultaneous assessment of the extent to which practices under consideration align with population needs, fit, and capacity. Another way to encourage buy-in is through pilot demonstrations, which may provide an important opportunity to demonstrate feasibility and effectiveness at an early stage and may provide the impetus for obtaining additional resources and support for large-scale efforts.⁴⁴ Cost-effectiveness analyses⁴⁵ can also be a critical tool for sustaining stakeholder buy-in, as such analyses compare the costs and outcomes of prosocial practices to other interventions (or the status quo) and demonstrate the benefits of improved outcomes and reductions in unnecessary costs.

The panel provided guidance for obtaining buy-in from multiple stakeholders by establishing a representative, multidisciplinary team that can effectively engage diverse stakeholders to secure initial and sustained buy-in (**Recommendations 1 & 5**), by providing staff and students with the opportunity to offer input on positive behavioral expectations and consequences for problem behavior (**Recommendations 1 & 2**), by using coaching to foster educator buy-in to the change process (**Recommendation 3**), and by using data to demonstrate progress and celebrate successes (**Recommendation 4**).

How to Use This Guide

For each of the five recommendations in this guide, we include the following:

- **Recommendation:** Details about the recommended practice, example strategies, and how the recommended practice supports positive behavior for all students. **Appendix C** contains detailed information on the individual studies that support each recommendation. Each recommendation also includes a "Spotlight on Implementation" that provides additional implementation details from one of the studies that supports the recommendation.
- How to Carry Out the Recommendation: Guidance on how to implement the recommended practice. This guidance is informed by the studies that support the recommendation and the expert panel's expertise and knowledge of resources and strategies available to help implement the recommendation.
- **Potential Obstacles:** Panel advice about challenges and solutions to overcome them.
- **Tools and Resources:** Supporting examples related to the guidance on how to carry out the recommendation.

The guidance on how to carry out each recommendation is presented in a sequence of steps. However, not every step will be appropriate for every audience, nor will every step be required to implement a recommendation successfully. **Recommendations 1** and 2 focus on implementing school-wide procedures to teach positive behavioral expectations and ensure effective and equitable consequences for problem behavior. **Recommendations 3 and 4** focus on using coaching and data to support implementation and iterative decision-making and problem-solving. **Recommendation 5** focuses on implementing the organizational systems needed to support the adoption and sustained use of prosocial behavior practices with fidelity.

Users of this guide are encouraged to apply the advice provided here in ways that best fit users' varied work contexts. Though this guide does not provide step-by-step instructions for implementation, readers will find resources mentioned throughout the guide that provide more details about how to apply particular practices.

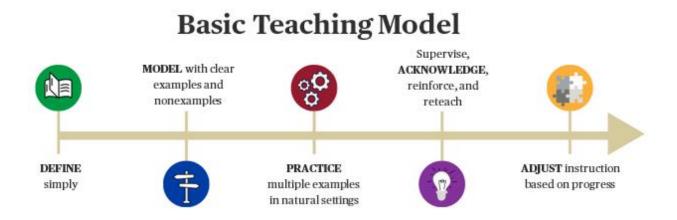
RECOMMENDATION 1: Implement School-Wide Procedures for Defining, Teaching, and Acknowledging a Small Set (e.g., 3-5) of Positive Behavioral Expectations.

Educators, administrators, related service providers, and school-based mental health practitioners can proactively address students' social, emotional, and behavioral needs by establishing a school climate that is predictable, consistent, positive, and safe. A positive school climate can be developed in part by teaching and rewarding the enactment of a small set (e.g., 3-5) of positive behavioral expectations. Behavioral expectations should be observable, measurable, positively stated, understandable, always applicable, and aligned with schools' and greater community's cultural standards. The cultural knowledge and norms of the community, educators' prior experiences and frames of reference, and the learning styles of culturally diverse students can be used to develop up to five behavioral expectations that are contextually relevant and effective for a school's staff and students.

Establishing behavioral expectations is best done early in the school year through explicit teaching using the same basic instructional model used for teaching academic skills (see **Figure 1.1**). Specifically, educators should teach, model, and practice each expectation across a representative group of at least three different settings (e.g., cafeteria, classroom, playground, hallways, and restrooms) and should use positive and negative examples so that students understand the difference between appropriate and problem behavior and actions. In addition, students should also receive feedback on such actions during planned practice opportunities. The expert panel recommends that, for students to learn the language, contexts, and behaviors that make school-wide expectations effective, educators should rely on direct teaching and ongoing review of behavioral expectations. After the beginning of the school year, when educators teach behavioral expectations through adult modeling, they should briefly review the expectations daily for the first few weeks of school and on an ongoing basis, with strategically timed booster sessions. For example, booster sessions should be held at least monthly and after every school break and holiday.⁴⁷

The educator should focus on recognizing and acknowledging students' positive behavior often by explicitly restating students' appropriate behavior and consistently showing approval for such behavior in typical school contexts. For example, educators can use practices that turn the review of expectations into a quick and fun strategy to efficiently prompt, encourage, and acknowledge students for following appropriate classroom expectations.⁴⁸ In addition, all school staff, including educators, administrators, related service providers, school-based mental health practitioners, and parents can work together to positively recognize, acknowledge, and reinforce appropriate behavior in students. Acknowledging appropriate behavior can expand the precision and generalization of students' acquired skills and may increase the opportunities to learn new and alternate ways of being appropriate in different setting.

FIGURE 1.1: Basic Teaching Model for a Small, Manageable Set of Positive Behavioral Expectations



SOURCE: Adapted from Sugai et al. (2015).

Recommendation 1 was informed by five studies of interventions with school-wide procedures for positive behavioral expectations. Two studies meet WWC group design standards without reservations,⁴⁹ and the other three studies meet WWC group design standards with reservations.⁵⁰ In all five of the studies used to support **Recommendation 1**, establishing school-wide procedures for positive behavioral expectations was a major component of the tested intervention.

The panel has a high degree of confidence in the research suggesting that implementing school-wide procedures for positive behavioral expectations is an effective practice. Recommendation 1 was predominantly derived from studies that meet WWC group design standards with reservations. See Appendix C for

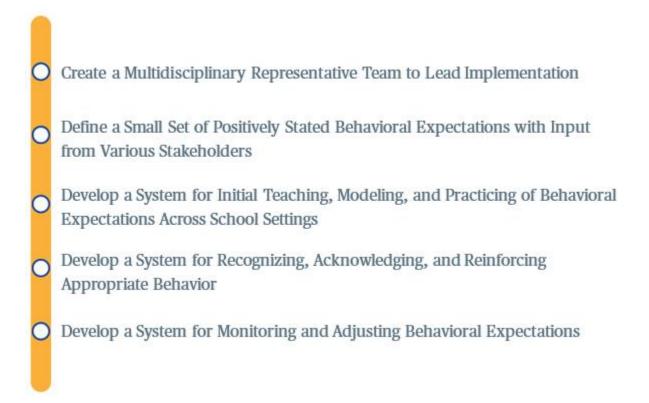
descriptions of the intervention features and findings from each study informing this recommendation.

How to Carry Out the Recommendation

This section describes strategies, examples, and tools that can be used by educators to support effective implementation of school-wide procedures for defining, teaching, and acknowledging a small set of positive behavioral expectations. These positive behavioral expectations can be developed by school administrators, educators, related service providers, and school-based mental health practitioners, in partnership with students, their families, and community stakeholders. All figures and mentions of specific strategies in **Recommendation 1** are offered as examples only and should not be read as endorsements of specific approaches or products.

The guidance below is informed by the studies that support **Recommendation 1**, as well as the expert panel's expertise and knowledge of resources and strategies available to help implement the recommendation.

FIGURE 1.2: Steps to Implement Recommendation 1



1. Create a Multidisciplinary Representative Team to Lead Implementation

This team aims to provide leadership for developing, implementing, and sustaining the positive student behavioral expectations that promote a positive learning environment. To achieve the team's purpose of efficiently and effectively engaging diverse stakeholder groups to secure buy-in, the membership of the multidisciplinary team should represent the school. A multidisciplinary team of 5-10 people could include educators (including special education teachers), administrators, related service providers, school-based mental health practitioners, family members, and community members (e.g., business leaders, church leaders). Inclusion of a member of the family and community can ensure that the representative team reflects the school's culture, especially the culture of underserved and diverse families.

For example, the team could consist of a systems coordinator, a school administrator, a parent member, a school psychologist, and an educator staff who have expertise and knowledge of:

- a) applied behavioral techniques,
- b) coaching,
- c) student academic and behavior patterns,
- d) the operations of the school across grade levels and programs, and
- e) the community the school serves.

FIGURE 1.3: Primary Responsibilities of the Multidisciplinary Representative Team

- Hold monthly, onsite team meetings to plan and coordinate school-wide behavior systems (see Team Initiated Problem Solving [TIPS] training manual for conducting effective meetings).
- Plan activities for implementing recommended practices (such as updating teaching curriculum, booster lessons of expected behavior, and acknowledgement assemblies).
- Continually monitor and adjust expectations of behavior.
- Attend district-wide meetings, training, and coaching to promote the continued development and maintenance of the recommended practice at your school.
- Present the behavioral and implementation data collected at staff meetings to keep staff
 up to date with current expectations; and receive input and feedback from staff.

SOURCE: Adapted from https://www.wisconsinrticenter.org/school-implementation/build-leadership-team/.

2. Define a Small Set of Positively Stated Behavioral Expectations with Input From Various Stakeholders

The expert panel suggests schools should identify and select 3-5 positively stated, easy-to-remember school-wide expectations that define success for all students. These behavioral expectations should be consistent with the school's effort to create a positive school environment and should align with the school's mission. These school-wide expectations can be used as guiding principles that are:

- a) broad constructs or classes of behavior,
- b) positively stated and brief, and
- c) comprehensive.

In other words, these principles allow anyone to address all behaviors by referencing one of the expectations.⁵¹

For example: Be respectful, Be responsible, Be safe, Be kind, and Be cooperative.

In addition, schools may wish to explore easy-to-remember catchphrases or assign names to these 3-5 school-wide expectations. If anyone walks into the school at any time and asks 10 random students to name the school-wide expectations, at least 80 percent of the time, those students should be able to name the expectations and provide examples of what they look like in action. See this example of a poster below:⁵²

Remember! The Golden Hawk says, "Be Respectful! Be Responsible! Be safe!"

Developing a matrix of specific behaviors/rules for clarifying each school-wide behavioral expectation across classrooms and settings can contribute to a common language for behavior in the school and a predictable, respectful, and safe experience for all (see **Figure 1.4** for an example of a developed School Expectation Matrix). The multidisciplinary team should be sure to clearly describe procedures for each of the school's non-classroom settings (e.g., hallways, cafeteria, school playgrounds, restrooms).⁵³

2a. Input from various stakeholders (principals, educators, related service providers, school-based mental health practitioners, students, and families)

Creating partnerships with all stakeholders (principals, educators, related service providers, school-based mental health practitioners, students, families, and the community) is a critical component to consider throughout the implementation of this recommendation. This partnership should be built on the concept that schools (staff and students), families, and communities all share the responsibility for student learning and success. All need to have a shared vision for what learning and success should look like and how best to achieve both.⁵⁴ As the multidisciplinary team implements this recommendation, the expert panel suggests developing explicit plans for how to engage and involve ALL stakeholder partners so that they can be a part of the decision-making process in the school.

FIGURE 1.4: An Example of a School Expectation Matrix

			Context				(
	Classroom	Cafeteria	Restrooms	Hallways	Buses	Computer Lab/Library	Playgrounds
Be Respectful	Follow directions Raise your hand Use appropriate language Use an appropriate tone Keep your hands and feet to yourself	Follow directions Listen to adults Exhibit good table manners Keep food on your plate or in your mouth Keep food in cafeteria	Respect the privacy of others Keep the facilities clean	Keep hands and feet to yourself Observe personal space Listen to adults in hallway Use your quiet inside voice	Follow directions Wait in line Listen to the bus driver Share seats Use appropriate language	Follow directions Use your quiet inside voice Raise your hand to be recognized	Follow adult directions Use appropriate language Obey fire drill procedures
Be Responsible	Employ active listening Participate actively	Stay in designated area Clean up your eating area	 Do your business and leave Flush the toilet Throw trash in appropriate receptacles Wash hands 	Carry a valid hall pass Go straight to your destination Use your own locker Pick up litter	Stay seated while the bus is moving Keep your body and belongings inside the bus	Follow media center and c omputer lab rules Use equipment correctly Access only appropriate websites	Dispose of trash in appropriate receptacles Use equipment correctly
Be Safe	Keep your hands and feet to yourself Remain in assigned location	Wait in line for your turn	Report problems, vandalism, etc.	Walk on the right Wear appropriate shoes at all times	Enter and exit in an orderly fashion Stay in your seat Report any incidents	Enter and exit in an orderly fashion Stay in your seat Report any incidents	Use equipment correctly Keep your hands and feet to yourself

SOURCE: Adapted from https://www.pbis.org/resource/expectations-matrix-poster.

3. Develop a System for Initial Teaching, Modeling, and Practicing of Behavioral Expectations Across School Settings

Establishing behavioral expectations is best done early in the school year. The expert panel recommends that for students to learn the language, contexts, and behaviors that make school-wide expectations effective, educators should rely on direct teaching and ongoing review of behavioral expectations. The multidisciplinary team should decide how all students will learn the expected academic and social behaviors across school settings. The panel also recommends that the school-wide rules, behavioral expectations, and routines be clearly defined, then taught to students at major school locations within the first few weeks of the school year's start, with ongoing reinforcement through interacting with students in naturally arising situations each day (see example of "Be respectful," "Be responsible," and "Be safe" in **Figure 1.4**).⁵⁵

Teaching should include adult modeling and demonstrating, providing opportunities to practice and offer feedback, and-most importantly-providing praise or acknowledgement (and appropriate reward) for students' effort (see Figure 1.5 for suggested details on how to get started). The expert panel recommends trainers and coaches focus most of the initial training on strategies that educators can use to teach behavioral expectations, including the strategies shown in **Figure 1.6**, developing written lesson plans.⁵⁶ Teaching strategies to educators ensures that staff show improved consistency in enforcing school behavioral expectations. Before receiving consistent information about teaching strategies, staff often have different expectations about what behavior is acceptable in different settings, which can lead to confusion among students. Importantly, educators should plan to hold periodic, scheduled booster lessons to help students maintain behavioral expectations over time. These booster sessions are especially important to hold after students return from long breaks, during times of the year when educators anticipate having more behavior issues, or when specific behavioral areas continue to be challenging. In addition, communicating the expected behaviors publicly in posters, school newsletters, local media, announcements, and assemblies can be valuable. Schools seeking more information may wish to explore resources from the Missouri School-Wide Implementation Workbook, such as their toolkit that offers more in-depth guidance to teaching expected behavior, and the PBIS Resource Tool Website that includes Suggested Scripts for Teaching and Reviewing Procedures.

FIGURE 1.5: Getting Started Teaching Behavioral Expectations

(1) Create lessons for your school-wide expectations and non-classroom areas.	(2) Develop a teaching schedule.	(3) Assist all staff and stakeholders to (a) understand the importance of teaching and monitoring social behavior and (b) develop the capacity to teach and monitor social behavior.
 Include expectation, include specific behavior or procedure, give context, tell, show, practice, monitor, and re-teach Assess the quality of your lessons by using the appropriate Artifacts Rubric available Consider full staff input: obtain consensus Distribute to staff in writing; included in staff handbook or website 	 Follow a perpetual calendar Create at the beginning of the year or orientation Assess the quality of your yearlong teaching schedule by using the appropriate Artifacts Rubric available Plan for ongoing teaching and review (e.g., monthly themes, review, or booster sessions) 	 Know how to conduct lessons Use common language

SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

FIGURE 1.6: An Example of an Initial Teaching Lesson Plan for Following Directions in All Settings

Example Elementary Lesson: Following Directions

(Initial Teaching For Acquisition)

	Expectation	Be Responsible
	Specific Behavior(s) and/or Procedures List behavior and steps to complete.	Following directions means: Keep eyes on teacher Do what the teacher asks Raise hand for help
	Context Identify the location(s) where behavior is expected.	All settings
	Teaching All Students	
Define	Tell Introduce the behavior and explain why it is important	Examples "Today we are going to review the skill "I can follow directions." Read the behavior and steps. Brainstorm with the class a list of adults that students encounter on any given day at school. These adults may include their own teachers, specialists, P.E. coaches, secretaries, media specialists, lunchroom workers, bus drivers, custodians, and others. Discuss why it is important to follow directions given by all adults in the building.
Model	Show Demonstrate or model the behavior, then model non-examples.	An adult blows the whistle on the playground. All students stop playing and look to see that the path to their line-up spot is clear. Then, students move, keeping their hands and feet to themselves in their line-up spot. The teacher directs the class to push their chairs in and line up. The class politely pushes in their chairs and forms a line. Students join the line in order and leave space for others to get in line. Students make it to their class on time. Teacher models the non-example: Teacher has students roleplay being the teacher. Students give directions to get materials out for a lesson, and teacher does not comply.
Practice -	Practice Give students opportunities to roleplay the behavior across all relevant settings.	Give a direction, such as "clear your desk," and time students to see how quickly they comply. "Simon Says" game: Practice with this follow-the-leader game to reinforce compliance with directions. Have students roleplay procedures such as lining up at the end of recess. Assign one student to be the "supervisor" and ask that child to verbalize the positive behavior they notice.
Reinforce	Precorrect/Remind Anticipate behavior and give students a reminder.	 "Before I give the next directions, let's review the steps to following directions. They are 'listen attentively, raise hand to speak or ask questions, and begin task immediately."
Supervise	Supervise Move around, scan students, and interact with them.	 After giving directions, move around, scan students, and interact with them to give students feedback about how they are following directions. Correct as needed.
Acknowledge	Geedback Observe student performance and give positive feedback to students.	 "Thank you for following the fire drill expectations and safely exiting the building." "Great counting off quickly and moving to numbered corners. That shows responsible use of our learning time. I heard some interesting discussions. Then, describe the interesting discussions you heard."
Reteach =	Reteach: Practice throughout the day:	 Have students share examples of when they promptly followed directions. Share examples of someone you saw promptly following directions. Tie that student's compliance to a positive outcome, such as having more time for recess because the class lined up in a timely fashion.

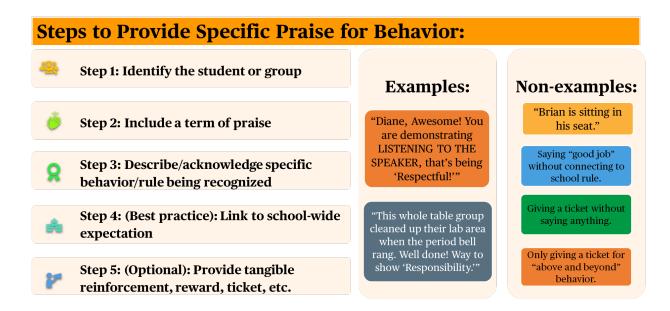
SOURCE: Adapted from 2019-2020 MO SW-PBS *Tier 1 Implementation Guide and Materials* from Midwest PBIS curriculum for Tier 1 PBIS implementation (Missouri Schoolwide Positive Behavior Support, 2019).

4. Develop a System for Recognizing, Acknowledging, and Reinforcing Appropriate Behavior

The expert panel recommends that schools establish a consistent system of immediate, intermittent, and long-term enforcement, monitoring, and reinforcement of positive behavior. This system should consist of all adults in the building positively acknowledging students' appropriate behavior to enhance the teaching of rules and to maintain patterns of desired behavior school-wide.⁵⁷

Positive acknowledgement creates a rapport between educators and students, supporting students' more frequent use of the expected behavior (see **Figure 1.7** for examples and non-examples). This positive acknowledgment can be verbal; tangible, such as rewards or incentives; or a combination of the two. An example of reinforcing appropriate student behavior by granting students rewards or privileges might be allowing a student to be first in line, giving a student extra free time, or designating a student to be class helper. For example, reinforcement and acknowledgement systems may include school-wide verbal and non-verbal social praise or token economies/currencies that are visual and tangible and that are delivered by all adults in the school. These tokens may be part of a continuum that leads to privileges or weekly drawings for students-and educators-for acknowledgement. Implementation of these school-wide procedures should contextually fit the school improvement plan and specific discipline needs. The expert panel recommends that appropriate behavior should be acknowledged at least four times more often than problem behavior (at least 4:1 rule of acknowledgment and corrective feedback) to create a positive classroom environment.⁵⁸ Schools seeking more information can review resources developed by Vanderbilt and the Tennessee Department of Education on why behavior-specific praise works.

FIGURE 1.7: Examples and Non-Examples of Specific Praise for Expected Behavior



SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

5. Develop a System for Monitoring and Adjusting Behavioral Expectations

The expert panel recommends an iterative process for determining how successful a school is at implementing the above-recommended practice and guiding plans to continue, sustain, or improve that initial success. An important part of the iterative process is to use fidelity tools that can be tailored to assess how faithfully the school staff are implementing the recommended practice relative to its original focus for each setting. Fidelity of implementation can be measured through an external evaluator or through educator self-assessment. **Table 4** in **Recommendation 4** provides details on six valid and reliable implementation fidelity surveys, which are widely available, to assess school-wide implementation of behavioral expectations. The process of using implementation fidelity data to make decisions is also discussed in greater detail in **Recommendation 4**. Schools seeking more information may wish to explore resources from **PBIS Assessment**, such as their web-based application that assists in high fidelity and sustained implementation of behavioral interventions and supports at the school level, as well as Mercer et al. (2017).

In a continuous improvement cycle, multidisciplinary teams should plan to periodically evaluate the degree to which their vision statement remains true to their ideals and the degree to which their design remains aligned. At any point, teams may engage in an amendment process to adjust their strategies for implementing behavioral expectations.

Potential Obstacles and the Panel's Advice

OBSTACLE: Building a positive school-wide social culture requires active involvement of most adults in the school. If the school principal and the majority of educators and staff do not support the effort, then establishing a positive school-wide social culture will be challenging.

PANEL'S ADVICE: Taking time to determine whether a behavioral problem exists in the school will greatly improve adopting and sustaining recommended solutions. Once the staff agree to the "parameters" of the solution, selecting and launching professional development efforts by the multidisciplinary representative team will ensure staff's sustained commitment to enforcing and reinforcing recommended "solutions" without resorting to punitive and exclusionary methods of discipline. Before selecting and implementing new school practices, educators should review the Hexagon Tool guidance developed by National Implementation Research Network, as illustrated in **Figure 4.5** and discussed in **Recommendation 4**, to assess the fit and feasibility of potential practices. For the recommended practice to be truly beneficial, at least 80 percent of educators and administrative staff must buy in.⁵⁹

The panel encourages schools to carefully review their processes to identify and improve staff buy-in. The following steps may be used to set up processes for implementing new practices.

- 1. **Use existing data** on office referral, attendance, suspension, expulsion, or educator reports to determine whether students' social behavior is of broad concern in the school (see **Recommendation 4** for more details). This existing problem should be described through concrete facts and examples.
- 2. **Obtain staff agreement** that any new efforts to improve social behavior will
 - a. be empirically supported,
 - b. be practical for use in the current school,

- c. build on the effective behavior support practices already used in the school, and
- d. focus on the smallest changes that produce the largest improvement for students.

For example, the multidisciplinary representative team may use staff meetings, quick surveys, or a drop-box to involve and ascertain staff input on critical parts of the implementation of the recommended strategy.

3. **Establish a representative team** to define a strategy for establishing a positive school climate and ensure that the team has both the responsibilities and authority to be successful.

To gain support, the multidisciplinary team can highlight how the recommended strategy employed can reduce disruptions and increase student engagement and instructional time, thereby making an educator's tasks easier and improving satisfaction among staff.

4. **Install the data systems, teaming systems, and reporting mechanisms** needed for effective implementation of the recommended strategy (see **Recommendation 5** for more details).

To obtain principal buy-in, see **Figure 1.8** for strategies that include underscoring similar and nearby schools' success stories to show the impact of the recommended practice(s).

5. **Obtain the professional development training and ongoing coaching** needed to implement multitiered behavior support effectively (see **Recommendation 3** for more details).

Buy-in should be secured from senior administrators, staff, and district leadership to support professional development and coaching efforts in the school.

6. Implement the recommended strategy.

Staff buy-in can be obtained by highlighting positive changes early and frequently and by recognizing staff who implement the recommended strategy with fidelity.

- Incentivizing staff through various acknowledgments and "shout outs" could further ease the transition to using the recommended strategy.
- 7. **Review data** collected on fidelity of implementation and student outcomes **and modify the recommended strategy** as necessary (see **Recommendation 4** for more details).

FIGURE 1.8: What Does Principal Support Look Like?

Presence of Principal Support	Absence of Principal Support	Five Factors That Increase Likelihood of Principal Support
 Allocate resources (teacher training and support, funding) Highlight priority to staff (time at staff meeting, presentations to family, community, board, website, back to school letter) Make evident in hiring practices 	 Understanding of PBIS across staff at a low conceptual level Planning time shortage Balancing competing initiatives becomes difficult Dependence on technical assistance increases 	 Innovation must be perceived to solve the problem Compatible with one's beliefs, values, prior experience, and needs Key opinion leaders must support the innovation Initially implemented on a small scale before scaling up across grade levels Outcomes of the innovation are visible

SOURCE: Adapted from McIntosh et al. (2016).

OBSTACLE: Sustaining fidelity of implementation over time.

PANEL'S ADVICE: Fidelity of implementation is essential for successful implementation and sustainability over time. A school-wide focus on specific desired behaviors can only be successful if staff agrees to recognize positive behaviors consistently and equitably. Monitoring implementation over time is important to ensure continued positive impacts from the recommended strategy and to ensure that implementation fidelity remains high. The panel recommends the following methods to sustain high fidelity of implementation.

1. **Implementation fidelity tools should be used** to initially assess practices to determine adoption, assess initial implementation and sustain it, and assist in

designing action plans to improve implementation. The panel suggests ensuring that staff understand the importance of fidelity and what constitutes implementation fidelity. Schools implementing Recommendation 1 can use several surveys described in **Table 4** in **Recommendation 4** to measure how well they implement systems to improve student behavior. The panel recommends that the multidisciplinary team take the Tiered Fidelity Inventory (TFI) to measure baseline fidelity, but other measures such as the Self-Assessment Survey (SAS) could be employed depending on the resources available.

The panel suggests having a designated person summarize data on implementation fidelity, highlighting successes and areas for improvement when reporting during faculty or multidisciplinary team meetings.

2. The panel recommends that **the organizational system should be updated to require schools to collect and report implementation fidelity data regularly**.

For example, a district requirement for sustained use of fidelity checks will ensure data are collected and reported. In addition, coaches can support and encourage data collection and motivate implementers to reflect on their practice, and if appropriate, identify areas of strength and those that could be improved. If necessary, coaching can also help to reexamine and adjust behavioral strategies being implemented to ensure that the critical elements of the recommended practices and school strategy are being implemented as desired.

3. **Districts can acknowledge school multidisciplinary teams** once a year for meeting the threshold for implementation fidelity and the fidelity progress made over time.

For example, districts or states can create a system to recognize high implementation fidelity, in which schools that exemplify high fidelity and consistently maintain high fidelity are celebrated and allowed to share their success stories of implementation with other schools and districts. The State of Maryland uses tiered levels of recognition based on implementation and outcomes to encourage high implementation fidelity:

- a. Bronze to recognize schools in the early stages of implementation
- b. Silver to recognize schools that are implementing with fidelity
- c. Gold to recognize schools that are implementing with fidelity and have evidence of improvement in student outcomes

OBSTACLE: Staff might feel overwhelmed by the extra work created for updating lesson plans and responding to appropriate behaviors.

PANEL'S ADVICE: Proper planning of implementation can help prevent staff from becoming overwhelmed during implementation of new practices. The panel suggests the multidisciplinary representative team follow the "stages of implementation" described in **Recommendation 5**. Additionally, the panel recommends integrating the recommended practices with the school's existing practices and communicating the practice through a simple and easy-to-follow framework (e.g., an expectation matrix or detailed lesson plans). These actions will help staff understand that their initial investment of time and effort during the start-up phase will result in orderly behavior throughout the year. Clear, quick, and demonstrable improvements in student behavior will also reduce staff's reluctance to implement recommended practices. If implementers are unable to show staff these additional benefits, the panel suggests obtaining more educator support by finding tangible ways to lessen struggling educators' teaching load, rotate shared responsibilities, or reduce nonteaching burden. Multidisciplinary representative team members can help reduce staff stress by being positive and supportive, listening to concerns, and collaborating to find innovative solutions. Finally, incorporating these responsibilities into job descriptions will ensure successful onboarding that makes expectations clear to new educators and staff from the beginning, especially if the school has a high staff turnover rate.

OBSTACLE: Students receive clear messages about what is expected and how to behave successfully across settings and situations in the school, but they may be unclear about how to respond when other students behave inappropriately.

PANEL'S ADVICE: Once students have learned positive expectations, educators can teach an appropriate routine to students for how to behave if other students behave inappropriately. Building on the school-wide foundation of expected behaviors, all students should be taught a formal, predetermined routine for recognizing the signals

of problem behavior by peers and responding to such behavior. This routine should include (1) telling the fellow student who is behaving inappropriately that their behavior is inappropriate and needs to change; (2) stepping away from the student who is misbehaving; and (3) recruiting assistance from adults if the problem behavior continues. Teaching a specific routine for identifying and responding to peer problem behavior as a general approach to all students removes some students' ability to use problem behavior (e.g., bullying, taunting, harassment, or intimidation) to get social attention or praise from peers. See the PBIS Bully Prevention Manual for more resources.

RECOMMENDATION 2: Implement School-Wide Procedures to Ensure that Consequences for Problem Behavior (a)
Prevent Escalation, (b) Interrupt and/or Redirect Problem Behavior to Expected Behavior, and (c) Minimize Inadvertently Rewarding Problem Behavior.

Student problem behavior can detract from instructional time and contribute to reduced student achievement, increased educator stress, and attrition.⁶⁰ Educators have been taught to use and often rely on punishment procedures that undermine student-educator relationships and risk public shaming of students. 61 These punishment procedures are proven ineffective at reducing problem behavior in the long term, 62 and the use of these procedures denies the educator an opportunity to use an instruction-based, proactive, and positive approach to teach expected behavior. 63 Educators, administrators, related service providers, and school-based mental health practitioners can proactively address students' social, emotional, and behavioral needs by establishing a continuum of preventive, consistent, predictable, and corrective consequences for discouraging problem behavior in classroom and non-classroom settings for all students. In turn, these consequences can help facilitate relationships that are foundational to teaching and student learning and success. Furthermore, using well-timed, positive, supportive, and consistent techniques to address problem behavior is essential to interrupting problem behavior and preventing escalation. Educators can view rule violations as corrective instructional opportunities to teach, practice, reinforce, and build student behavioral competence.64

For example, when students are talking too loudly during group work, the educator could respond, "Please respect others by using a quieter whisper voice while working with your partner."

These strategies will ensure increased probability of future expected behavior, providing the student a chance to succeed, reducing out-of-instruction time, and building constructive student-educator relationships and a positive learning

environment for all students. Educators who use the above strategies consistently tend to have the lowest rates of disruptive classroom behavior.⁶⁵

It is important to address and correct "minor" problem behaviors before they get worse; however, it is also helpful to remember that educators who wish to create a positive classroom environment should acknowledge appropriate behavior at least four times more often than problem behavior. 66 Systematic, consistent, and fair discipline procedures are crucial to developing a successful system of consequences for problem behavior in the school—a system with disciplinary responses that are respectful to students and that focus on teaching appropriate behavior as often as possible. An earlier Institute of Educational Studies practice guide, the 2008 Reducing Behavior Problems in the Elementary School Classroom practice guide, provides some strategies that may still be relevant today to reduce problem behavior in elementary school students.

Recommendation 2 was informed by five studies of interventions with school-wide procedures for ensuring consequences for problem behavior. Two studies meet WWC group design standards without reservations,⁶⁷ and the other three studies meet WWC group design standards with reservations.⁶⁸ In all five of the studies used to support Recommendation 2, establishing school-wide procedures for ensuring implementation of consistent and effective consequences for problem behavior was a major component of the tested intervention.

The panel has a high degree of confidence in the research suggesting that establishing school-wide procedures for ensuring consequences for problem behavior is an effective practice. See Appendix C for detailed descriptions of the intervention features and findings from each study informing this recommendation.

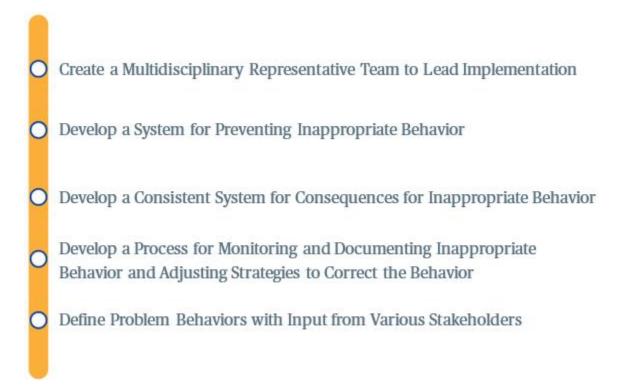
How to Carry Out the Recommendation

This section describes strategies, examples, and tools that can be used by educators to support effective implementation of school-wide procedures for ensuring consequences for problem behavior. The consequences for problem behavior can be developed by school administrators, educators, and staff, in partnership with students, their families, and community stakeholders. All figures and mentions of

specific strategies in Recommendation 2 are offered as examples only and should not be read as endorsements of specific approaches or products.

The guidance below is informed by the studies that support the recommendation, as well as the expert panel's expertise and knowledge of resources and strategies available to help implement the recommendation.

FIGURE 2.1: Steps to Implement Recommendation 2



1. Create a Multidisciplinary Representative Team to Lead Implementation

Usually, **Recommendations 1 and 2** are implemented simultaneously. To avoid duplicating efforts, the panel suggests asking some of the questions as illustrated in **Figure 2.2** if there is a need for creating a new multidisciplinary representative team. If implementing **Recommendation 2** separately from **Recommendation 1** or deciding to create a new team to reduce staff burden, school staff should follow procedures similar to those discussed in **Recommendation 1** to create a multidisciplinary representative team.

FIGURE 2.2: While Assembling the Team, Ask the Following Questions:

Do you need a new team?

Is there an existing team that is already working on improving school climate or student behavior?

Do you need to add any additional members to your team?

Why is the representation important in your school?

What would a representative team look like in your school?

How will you ensure families and other stakeholders are represented to capture voice and choice from the school community?

SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

2. Define Problem Behaviors with Input From Various Stakeholders

While **Recommendation 1** focuses primarily on the explicit instruction of behavioral expectations and positive reinforcement for meeting those expectations, **Recommendation 2** emphasizes the need for consistent consequences to hold students accountable when they have difficulty meeting behavioral expectations. ⁶⁹ Educators need professional development and coaching to master the strategies and maximize their use of **Recommendation 1** and effective responses to prevent problem behavior. In addition, the panel acknowledges that educators should reduce the need to refer a student to the office, particularly because sending a student to the office removes that student from the academic learning environment. Administrators should offer coaching for educators on how to prioritize effectively responding to student problem behavior *within* the classroom. **Figure 2.3** is an example flowchart that a multidisciplinary representative team could use to systematically discourage problem behavior and prioritize the use of within-classroom educator response before a student is sent out of the learning environment.

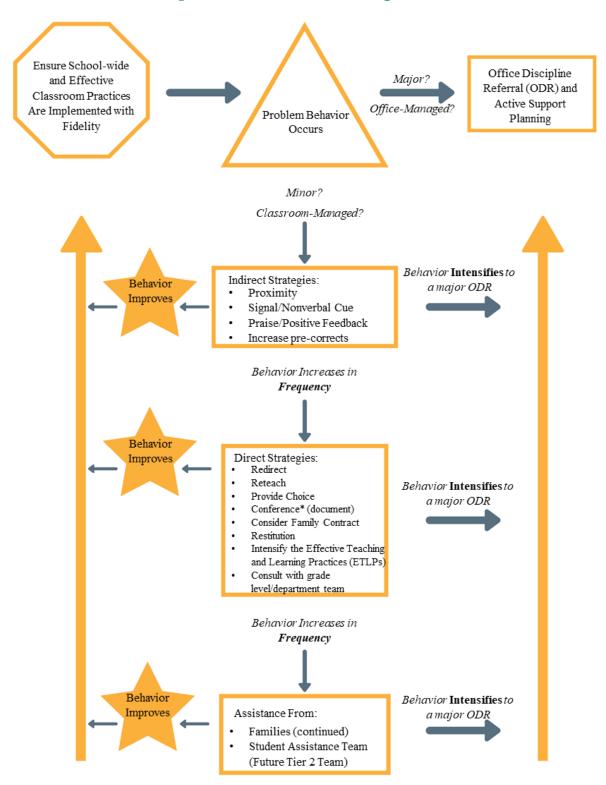
To implement **Recommendation 2** consistently, educators first need to define "problem behavior." Staff may have different ideas about what constitutes a problem

behavior and the appropriate response in terms of "minor" offenses managed by staff or "major" offenses managed by the office. To reduce confusion and frustration among staff and students, any behavior that disrupts the class and is not listed on the classroom rules and procedures matrix developed in **Recommendation 1** can be deemed "problem" behavior. The multidisciplinary representative team can determine the problem behaviors that need to be office-managed through explicit definition of each behavior, which ensures all staff share a thorough understanding and use office referrals consistently.⁷⁰

Just as it is important for the multidisciplinary team to define major/office-managed problem behaviors, it is also important for the team to clearly define minor/classroom-managed problem behaviors. Usually, any behavior not explicitly stated to be office-managed behavior is expected to be classroom-managed minor unexpected behavior (see **Figure 2.4**).

Once problem behaviors have been clearly defined as office- or classroom-managed, the multidisciplinary team should develop consistent written procedures for office referrals. Such written documents should clearly describe the procedures and develop staff's thorough understanding of minor/major offenses, classroom-managed/office-managed behaviors, staff roles, and follow-up procedures during and after referral (e.g., resolution, possible consequences, data entry). These procedures should encourage teaching and office staff to implement an office discipline referral (ODR) consistently (each time a similar event occurs), equitably (with each student who displays the major unexpected behavior), and with fidelity (as the procedures are described in the written document). This process will require the team to develop an ODR form aligned with the expected behavior definitions and inclusive of all the essential items that need to be captured: who, what, when, where, how, and why (see Example of an Elementary ODR Form in **Figure 2.5**).

FIGURE 2.3: An Example Flowchart to Discourage Problem Behavior



SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

FIGURE 2.4: An Example of Defined Classroom-Managed Problem Behaviors

Minor/Classroom-Managed	Definitions
Defiance, Disrespect,	Brief or low-intensity failure to respond to adult
Noncompliance	requests
Disruption	Low-intensity but unexpected disruption
Unexpected Language	Low-intensity instance of unexpected language
Physical Contact	Non-serious but unexpected physical contact
Property Misuse	Low-intensity misuse of property
Tardy	Arrives at class after the bell
Technology Violation	Non-serious but unexpected use of technology

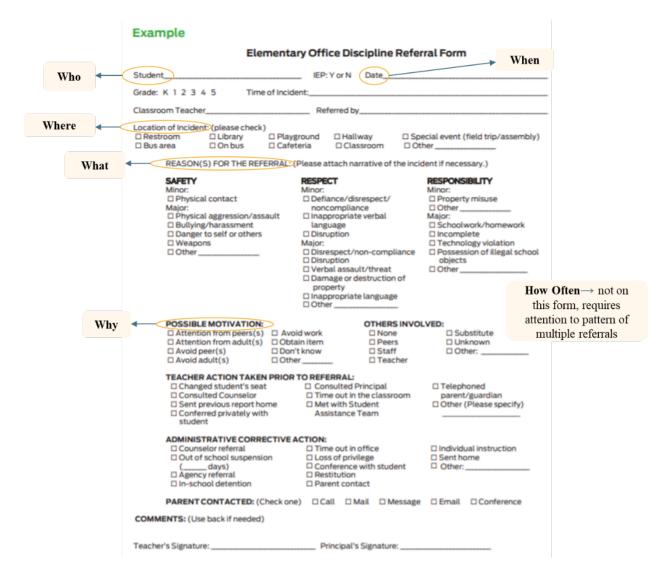
SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

Finally, engaging staff in selecting and defining these major and minor problem behaviors is critically important, especially if staff inconsistently refer minor problem behaviors to be office managed. To obtain staff buy-in, the multidisciplinary team may choose to allow staff to create lists of major or minor problem behaviors and to define the consequences, respectively.

Once a final list of classroom-managed and office-managed behaviors and their definitions has been developed, the list should be distributed in staff, student, and family handbooks and should be made available on the school website.

For example, to obtain staff buy-in, the multidisciplinary team can gather staff input on problem behaviors and the behaviors' definitions by allowing staff to individually write a list of problem behaviors on a sticky note. Ask each staff to share all their sticky notes, eliminate duplicate behaviors between lists, and review the final list to add any problem behaviors that might be missing. Then, as a team, begin to define each problem behavior or use a volunteer work group to review staff's sticky-note lists to draft a composite list of problem behaviors that all staff can review at a later date.

FIGURE 2.5: An Example of an Office Discipline Referral Form That Captures Essential Items of Problem Behavior



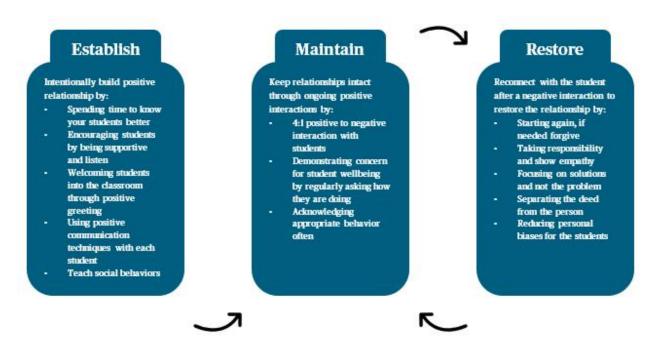
SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

3. Develop a System for Preventing Problem Behavior

It is critical to remember the importance of prevention as a useful strategy for decreasing the likelihood of problem behaviors. The expert panel encourages educators, when student behavior becomes a consistent concern, to reflect on their use of preventive strategies that explicitly recognize and then acknowledge the role of internal, often implicit, biases when responding to students' problem behavior. A preventive strategy that the panel recommends is to build positive student-educator

relationships, as these relationships have long been considered a foundational aspect of positive school experience. The Establish, Maintain, and Restore strategy⁷¹ can be used as a framework for understanding educator-to-student relationships in three dimensions, as illustrated in **Figure 2.6**. Educators can use similar high-leverage and low-time investment strategies to reflect on their relationships with each of their students. In addition, educators can use these strategies to intentionally focus on students who exhibit problem behavior or to focus on students with whom educators are struggling to connect. These strategies can increase appropriate student behavior that fosters a better classroom climate and more academically engaged students. Recommendation 1 of the Reducing Behavior Problems in the Elementary School Classroom Practice Guide, published in 2008, provides additional strategies that can be used to prevent problem behavior.

FIGURE 2.6: A Simple Framework to Build, Maintain, and Restore Positive Relationships With Students



SOURCE: Adapted from https://www.swsc.org/cms/lib/MN01000693/Centricity/Domain/124/Clay%20Cook%20-%20Creating%20nurturing%20and%20responsive%20environments%20handout.pdf.

4. Develop a Consistent System for Consequences for Problem Behavior

When students see rules applied fairly, they are more likely to behave appropriately. Generally, schools with (a) clear rules and reward systems and (b) businesslike

corrections and sanctions experience few problem behaviors because the corresponding responses to such behaviors are predictable for students. Students also learn over time that there are clear consequences for problem behavior. When rules are consistent, students develop a respect for rules and internalize beliefs that the system of governance works.⁷² The panel recommends that the multidisciplinary representative team specifically lay out a consistent system that clarifies in detail the consequences for each problem behavior. For example, the multidisciplinary team may provide staff with guidance on how to provide consistent corrective consequences in response to problem behaviors:⁷³

- 1. **Identify** Explicitly state the observed problem behavior and why it does not meet school-wide expectations.
- 2. **Redirect** Communicate precisely what the expected behavior should be (with possible input from the student[s]), quickly disengage at the end of behavioral correction by refocusing on the class (if needed), and try to pair with specific contingent praise after the student engages in appropriate behavior.
- 3. **Minimize** Reduce the likelihood of rewarding the problem behavior (e.g., paying too much attention to the student).

The corrective consequences should be administered in a calm and respectful manner using a brief, concise, consistent, and informative statement in close proximity to the student to encourage compliance and build a strong relationship. An appropriate continuum of evidence-based strategies can be used to prevent, pre-correct for, and respond to problem behaviors to minimize disruption and decrease the likelihood of problem behavior in the future. These strategies include the use of simple (e.g., correcting problem behavior) and more complex (e.g., differential reinforcement) instructionally based strategies to respond to problem behavior. Figure 2.7 provides some strategies that can be used to respond to problem behavior, and Figure 2.8 provides an example of a progressive hierarchy of responses to problem behavior that an educator can administer.

It is essential to use consequences that have educational relevance and reflect logical, developmentally appropriate, setting-specific responses to problem behaviors. In summary, educators should use appropriate consequences to help students change their problem behavior. Be sure to pair any additional corrective consequence with the teaching of expected behavior within an environment that has a significantly

larger proportion of positive, specific feedback to corrective feedback (e.g., ratio of 4 positives to 1 negative; Caldarella et al. [2020]). Educators seeking more information may wish to explore resources from a particular district's <u>PBIS handbook</u> that provides examples of discipline procedures.

FIGURE 2.7: Continuum of Response Strategies to Problem Behavior

it?		demonstration of the appropriate skill.	
	Practices are chosen by the Tier 1 team, added to the school's discipline flowchart, and installed and supported through professional development (PD).		
į.	Sample Practices Team May Install	Definition	
	Planned Ignoring	Ignore student behaviors when their motivation is attention, and continue instruction without stopping	
	Physical Proximity	Using teacher proximity to communicate teacher awareness, caring, and concern	
	Direct Eye Contact	The "teacher look" to get attention and non-verbally prompt a student	
	Signal/Non-Verbal Cue	Teacher gestures to prompt a desired behavior or adherence to a procedure and routing	
	Praise the Appropriate	Use Behavior Specific Praise with a different student or group to remind all students of	
	Behavior in Others	the expected rule/expectation.	
	Redirect	Restate the desired behavior as described on the teaching matrix	
	Praise Approximations	Reinforcing one behavior and not another. For example, praise the positive behavior	
	(Differential Reinforcement)	while ignoring the student's inappropriate behavior. State and demonstrate the matrix behavior. Have the student demonstrate. Provide	
What	Re-teach	immediate feedback.	
does it	No construction of the	Specific feedback that informs the student to stop the undesired behavior, and to engage	
		in the desired behavior connected to the school-wide expectation.	
look like?	A	Respectfully address the student	
	Specific Error	Describe inappropriate behavior	
	Correction	Describe expected behavior/rule	
		Link to school-wide expectation on matrix	
		5. End with encouragement	
	1 01 01 01 02 02 02 0	Strategies helping a student regulate, or "quiet" their stress response, relate to an	
	Regulate, Relate, Reason	empathetic adult, and reason to think logically.	
	and the same	Give appropriate alternative choices to lead to the same target outcome. Examples:	
	Provide Choice	accomplish the task in another location, change the order of task completion, use	
		alternate supplies to complete the task, or offer a different type of activity.	
	6 6 11 6 1 .	Ask the five restorative questions. Understand the problem and the alternative behavior.	
	Conference with Student	Provide rationale. Practice and give feedback. Develop a plan.	
	Restorative Circle	Inclusive circle format and processes to address specific incidents that have occurred, and connect learning to school-wide expectations (Costello et. al., 2010)	
		havioral teaching strategies to meet different functions, intensity, and rates of	
Why?		single strategy will work for all youth or in all situations.	
		stead of correcting through a positive, proactive, educative approach, is linked to increase ancy, and dropouts (Mayer & Sulzer-Zazroff, 1990; Skiba, Peterson, & Williams, 1997).	
	Trauma- Lens? The continuum of response provides opportunity to use trauma informed strategies to help the student regulate, connect (relate) with the adult, and allows the student to access their problem-solving skills (reason)		
How?	A formal toolkit of practices should be selected by the Tier 1 Team, and installed through ongoing PD. The toolkit should include 1) practices to address skill deficit (lack of a skill to perform a desired behavior), 2) practices to address performance deficit (lack of a motivation to perform the desired behavior), and 3) Error Correction as a universal		
	corrective feedback process.		
	Provide opportunities for self-assessment, peer-observation, and coaching to improve fidelity of the strategies.		
	 Use the least resource intense practice possible to achieve the objective. Focus on consistency and patience in responding to behavior. 		
NAME OF TAXABLE PARTY.		wide list of recommended practices in a discipline flow-chart.	
Tips?		nould communicate support, caring, and relationship building.	
See Section		on function of behavior to support selection of practice	
		nishments, nor a process for teachers to follow in order to reach a punishment; aming response cost system (clip-charts, names on board, etc.)	

SOURCE: Adapted from Costello, B., Wachtel, J., & Wachtel, T. (2010) and http://www.midwestpbis.org/materials/classroom-practices.

FIGURE 2.8: Example of How to Use Continuum Response Strategies to a Particular Problem Behavior

Hierarchy of supportive consequences	Example: A student is fiddling with objects on her desk instead of beginning a writing assignment.
Step 1: Differential reinforcement of alternative behavior	The educator ignores the fiddling with objects behavior, provides specific praise to a peer who is sitting close to the student and writing as instructed, and provides positive reinforcement when the student stops fiddling with objects and begins writing.
Step 2: Nonverbal reminder	If the student does not begin writing, the educator encouragingly points to the student's paper to prompt the student to begin writing or provides a visual cue such as a picture of the student writing or a cue card that reads, "Time to write."
Step 3: Verbal reminder	If the student does not begin writing, the educator provides an encouraging verbal prompt such as, "It's time to start writing."
Step 4: Offer assistance or modify the task	If the student does not begin writing, the educator writes the first sentence for the student and asks the student what she can write next. The student states what she can write next, starts writing, and the teacher walks away, allowing the student to continue working.
Step 5: Provide a safe space for de-escalation	If the student does not respond to Steps 1-4 and begins escalating into emotional distress, the student goes to a predetermined safe space in the classroom to calm down. Once she has calmed, the student returns is sent to her desk to complete the writing activity.

SOURCE: Leach and Helf (2016).

5. Develop a Process for Monitoring and Documenting Problem Behavior and Adjusting Strategies to Correct the Behavior

As discussed, it is essential to provide educators both with strategies to build positive relationships with all students and with skills to respond to problem behavior, which prevents escalation and classroom disruption. However, it is also important for educators to know the source of remaining behavioral challenges and which students continue to be removed from the learning environment for disciplinary reasons.

School multidisciplinary representative teams may want to collect regular, accurate, up-to-date disciplinary data and monitor the data to see any disparities among student groups. Please note that

The "Big 6" Questions About Problem Behaviors

- **Who** are the students generating behavior problems?
- What types of problem behaviors are occurring?
- **When** are the problem behaviors occurring?
- Where are the problem behaviors occurring?
- How often do the problem behaviors occur?
- Why does the problem behavior keep occurring under these conditions?

the procedures for using data are discussed in greater detail in **Recommendation 4**. After collecting data, teams can focus primarily on reviewing patterns of offenses like distracting the teacher or classroom, classroom disruption, and not listening to instructions, which usually comprise a large percentage of overall referrals and suspensions. These offenses are the ones that we can affect by providing professional development and ensuring consistency in educator response.

To help find consistent problem behavior, multidisciplinary representative teams may seek to analyze their data to determine **what** offenses are prevalent, **how often** the offenses occur, **who** is involved, and **what** knowledge gaps about appropriate behavior exist among student groups. A clear understanding of the trends leads to educators identifying the causes (**why** does the problem behavior keep occurring under these conditions) of the disciplinary actions, which in turn provides information for school teams about how to intervene to decrease disruptions in student learning and to eliminate discipline disparities among student groups.⁷⁵

School teams can review and use these data to guide decision-making for schoolwide and more targeted professional development, as well as refinements to school-based systems and practices, to increase the use of effective and efficient behavioral management strategies. Although functional behavioral assessments (FBAs) are widely recommended for use to manage behavior, there are clear indications that this evidence-based practice is not used regularly or reliably. Nevertheless, the core elements of FBAs that promote function-based thinking may help bridge this gap and serve as an efficient strategy to address behavior problems and inappropriate referrals. Figure 2.9 illustrates how consequences can decrease problem behaviors and increase the likelihood that appropriate behavior will be repeated in the future. Educators seeking specific strategies for practical FBA and training methods designed for use with students who exhibit consistent behavior problems may wish to explore resources available at PBIS.org in addition to a case study illustrating how FBA can be implemented by general education teachers in Hershfeldt et al. (2011).

Behavior: Antecedents: Consequences: Events that happen before and trigger the An observable act. The resulting event or outcomes that occurs immediately following the behavior. behavior. What the student does. Reinforcement Avoid/Escape - Cout of something: Access - Gain Something: Target (Problem) Setting Events: Triggering Events Replacement Sensory Sensory Slow triggers Fast triggers Behavior Goal: (Appropriate) Power/control Tasks Socialization Occurrence Осситенсе Consequence behavior Increase Acceptance immediately Stress/anxiety Affiliation behavior and immediately before behavior Gratification Tangibles Activities acquire skills(s) before Justice/Revenge Hallway expectations and routines clarified and Students keep voices quiet, keep body to The Media Specialist observes the students following the hallway expectations and says, self, and walk on the right side of the Teachers use prompts/pre-corrects to remind "Great job of keeping your voices quiet, hallway students to walk in the hallway, use quiet keeping your body to the right, and voices, keep body to self, and walk on the right staying to the right. You are showing respect for others and being safe. Teachers greet, while actively supervising the hallway.

FIGURE 2.9: ABCs of Functional Behavioral Assessments

SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

Potential Obstacles and the Panel's Advice

OBSTACLE: Educators may have biases that lead to disproportionality of discipline or punishment for a particular group.

PANEL'S ADVICE: Implicit biases—such as prejudice, stereotype threat, and racial anxiety—are attitudes that affect one's understanding, actions, and decisions in an unconscious manner.⁷⁸ As these implicit biases are deep-rooted, a one-time training for equity in discipline tends to reduce and possibly eliminate *explicit* biases but also tends to be insufficient to counteract any *implicit* biases. Promoting specific, ongoing, targeted strategies in professional development and learning communities may help staff curb implicit biases' impact on decision-making⁷⁹ by encouraging staff to (a) engage in continuous self-reflection either by themselves or with peers, (b) have difficult conversions in consultation with a trained and culturally competent professional,⁸⁰ (c) take deliberate steps to cultivate awareness of their own biases, (d) understand the privileges and disadvantages of different groups, and (e) improve their understanding of how biases work in education settings.

Another way to increase awareness of systemic biases in education is to regularly review discipline disproportionality data reports. 81 However, those data need to be supplemented with the development and maintenance of responsive and culturally fit practices that consider environmental circumstances and treat students with kindness, thereby cultivating positive student-educator relationships. For example, to develop a culturally fit practice in their school, the multidisciplinary team can use the ReACT intervention⁸² that allows school personnel to (a) identify specific targets for intervention, (b) select strategies most likely to address the school needs, and (c) implement strategies under a schoolwide approach to fit the school's culture (e.g., team-based implementation, use of existing data systems). An alternate strategy of developing culturally fit practices is to use the Double Check framework–which includes school-wide data review, professional development, and coaching procedures—to reduce disproportionality in discipline.83 See www.doublecheckcoaching.org for web-based tools and training in the form of intervention modules to support both educators and coaches in identifying and implementing culturally responsive behavior management practices.

OBSTACLE: Teachers who may not use effective classroom behavior management strategies, may rely on punishment and exclusion procedures.

PANEL'S ADVICE: Approaches to classroom management that rely primarily on tangible rewards and public or fear-based forms of punishment have been proven ineffective in the long run. 84 Students need to own the social responsibility to develop self-discipline and need to have intrinsic motivation to behave appropriately without fear of punishment. Establishing behavioral expectations may help students build this social commitment. Therefore, in addition to encouraging a school-wide focus on behavioral expectations, educators should obtain buy-in from students on both the behavioral expectations and consequences for deviating from these expectations. However, some teachers may need additional resources and support to develop effective classroom behavior management strategies (see resources available online at classroom checkup.org85), training in classroom management systems, and implementation either through peers using tools such as Classroom Management Practices Observation Tool86 or through coaching87 (see Recommendation 3).

OBSTACLE: Some educators may have philosophical concerns or reservations about the use of extrinsic reinforcement and, therefore, may not see this strategy or practice as acceptable or feasible.

PANEL'S ADVICE: Fundamentally changing the behavior of an individual requires learning and positive reinforcement to strengthen the desired approach. However, educators may be reluctant to use reinforcement or praise, as that typically involves changing educators' own behavior. In addition, educators may have inaccurate information about reinforcement being ineffective, have an alternative philosophy (e.g., find a common ground with the student), or find reinforcement or praise as additional work. The multidisciplinary team should seek to emphasize that educators should consider their schools' actions as building a community with clear norms and ways of ensuring student success, which may require all adults to collaborate. Setting this collaborative expectation and using data to document student success can be an effective way of getting educators to use simple recognition techniques. Another way to counteract educator reluctance is through exploring different strategies regarding individual educators' beliefs about their own practices through discussions with influential peers or trained coaches. Additionally, data can be used to demonstrate the

effectiveness of external reinforcement on establishing and maintaining expected behavior and student learning.

OBSTACLE: Educators may claim that they are not responsible for correcting the problem behaviors of students who are not in the educators' classrooms.

PANEL'S ADVICE: For reinforcement to change student problem behavior, all school staff need to take an approach of active supervision, in which staff positively, frequently, and authentically address problem behavior in all settings through consistent and fair discipline practices aligned with the school's system of consequences. 88 Using this school-wide collective approach ensures appropriate student behavior and engagement, rather than using an approach in which educators take responsibility only for their own students. However, there needs to be a balance for responding to problem behaviors immediately and there is a need to avoid overwhelming students with corrective actions; therefore, educators should adhere to the 4:1 rule of positive to negative feedback. With a heightened educator awareness of the 4:1 rule, the message—that any staff member may play a role in unintentionally reinforcing student's problem behavior—can be communicated through professional development and coaching to encourage value throughout the school. This 4:1 rule reinforcement can establish and build on authentic, positive student-educator relationships and, ultimately, establish more effective and more culturally sensitive communication while promoting learning.

FIGURE 2.10: Effective and Ineffective Approaches to Providing Feedback to Students

EXAMPLES:	NON-EXAMPLES:
"Please raise your hand before calling out your answer."	Shouting "No!" or "How many times do I have to tell you to work quietly?" to a student.
"Please use a quieter whisper voice while working with your partner." <u>Later</u> : "Thanks for being respectful and lowering your voice."	A 5-minute conversation about what the student was thinking. "Don't you think you should be using your time better?"
"Please keep the lab equipment on the table." <u>Later</u> : "Thank you for being safe with the lab equipment."	A teacher loudly tells a student that he is not being responsible.
"Thank you for being responsible and cleaning the area around your table. You are helping the cafeteria be a nice place to eat."	"What do you think you're doing?" "What's going to happen if I call your mother?"
"Great job bringing your appropriate materials to class today."	"Didn't I just tell you to get your work done?" "Why are you talking when I'm talking?" "Do you want me to send you to the office?"

RECOMMENDATION 3: Use Coaching to Support Implementation of Evidence-Based Instructional and Classroom Management Strategies.

A myriad of factors can affect the successful implementation of evidence-based interventions and practices. These factors include the presence of competency drivers (e.g., strategies and methods for selecting staff, training, coaching, and monitoring fidelity), organizational and institutional supports (e.g., policies, procedures, data systems, and feedback loops), and leadership skills (both technical and adaptive). ⁸⁹ Competency drivers are essential for offering support and guidance to school-based implementers who may not have the knowledge or skills, or the incentives or time, to engage with an evidence-based practice ⁹⁰ and for ensuring an intervention or practice is implemented as intended. ⁹¹

Coaching has emerged as a promising research-based approach⁹² for improving implementation of evidence-based instructional and classroom management practices.⁹³ Coaching is a professional development activity typically conducted onsite and focused on application of skills and strategies, frequently taught or developed initially through didactic workshops, within authentic practice settings (e.g., classrooms). Whereas initial training is a professional development activity associated with establishing new skills and knowledge, coaching is the professional activity associated with facilitating use of established skills and strategies within local settings/situations. Similar to school-based consultation, best practices in coaching involve using a systematic data-driven problem-solving process focused on prevention and remediation, in which observation and performance feedback can be powerful for achieving growth in educator's skill and strategy use.

The panel believes coaching to be an important, effective implementation activity⁹⁴ that can be used to supplement initial training and provide ongoing professional development to educators, particularly those who are new to the profession.⁹⁵ Although training is critical for building knowledge of any practice, training supported by ongoing coaching can result in individual educators implementing 80-90 percent of new practices.⁹⁶ As a result, coaching not only has the potential to help educators build capacity, develop skills, and increase confidence to implement practices with high fidelity, but coaching can also maximize the transfer and translation of skills

acquired during training into sustainable practice.⁹⁷ To support implementation of recommended practices, the panel considers coaching to be an overt, durable, and necessary link between an educator's training and actual use of practices.⁹⁸

The panel suggests that coaching be provided in gradual approximations, starting with universal coaching provided to all educators and ending with intensive, individualized coaching for a few educators. For example, as school multidisciplinary teams establish major components of their school-wide implementation plan, all educators may need frequent, in-person, and direct coaching support. As school staff achieve implementation fluency, coaching activities can be less frequent and more informal, with only a few educators receiving individualized coaching to address challenges in implementation. With more advanced implementation teams, coaching could focus on helping school multidisciplinary teams assess the accuracy and consistency of their implementation plans, maximize targeted outcomes, increase implementation efficiency, acknowledge and communicate progress to district and state leadership, and facilitate data review to enhance school-wide implementation plans.⁹⁹

Several coaching models and efforts focus on individual educators. These models and efforts provide organization and structure that can motivate individual educators to adopt new practices and to support evidence-based instructional and classroom management practices. Furthermore, some of the latest coaching model adaptations have been shown to improve educators' delivery of social emotional curricula, 100 increase teacher response to bullying behavior, 101 increase adoption of culturally responsive practices, 102 increase use of classroom management practices, 103 and reduce disproportionality in discipline. 104 Importantly, the procedures and interactive styles in such coaching models are based on motivational interviewing, a collaborative conversational style for strengthening a person's own motivation and commitment to change. 105 Multicomponent consultation frameworks that integrate motivational interviewing techniques as well as strategies targeting educator knowledge, skills, and attitudes hold promise for improving educators' implementation of general classroom management strategies and targeted intervention supports. 106

Coaching can likely be integrated into the job responsibilities of multiple professionals within a school or district. For example, school psychologists often play specialized roles in supporting students' academic and behavioral needs: a school psychologist or school social worker may serve as an individual coach in the school, as long as they

have the necessary skills to build positive and supportive relationships with staff and encourage adult behavioral change. Similarly, districts can incorporate coaching responsibilities into the roles of team leaders and department chairs, provided they have the appropriate training and are given adequate support. Achieving all of these coaching expectations can be difficult in the context of shrinking resources, multiple competing and overlapping initiatives, lack of available qualified personnel, and time. Although the majority of coaching efforts occur at the classroom level, the panel recommends developing the infrastructure to support coaches at the district level. Specifically, districts should identify a single coaching model and provide coordinators who can oversee training and monitoring of implementation fidelity, including coaching-specific processes and skills (see **Recommendation 5** for additional discussion on the importance of district- and state-level coaching). 107

Educators, administrators, related service providers, and school-based mental health practitioners who engage in coaching should be taught specific skills to change adult behavior and to apply those skills in the context of the coaching process. People who carry out coaching responsibilities require ongoing support and feedback, which reinforces the continuous use of their coaching skills and allows these individuals to implement coaching with confidence. Moreover, coaching to influence a team's collective behavior can increase organizational support to implement practices with fidelity; this type of collective coaching requires additional skills, such as consensus building. The panel recommends that school multidisciplinary teams ensure that individuals who provide coaching have the necessary experience with individual or school team implementation and problem-solving and that the individual's own coaching preparation is linked with actual individual or school team training.

Recommendation 3 was informed by three studies of interventions with coaching components. Two of the studies meet WWC group design standards without reservations, ¹⁰⁸ and the other study meets WWC group design standards with reservations. ¹⁰⁹ In all three of the studies used to support Recommendation 3, coaching to support implementation of evidence-based instructional and classroom management strategies was a major component of the tested intervention.

The panel has confidence in the research suggesting that using coaching to support implementation of evidence-based instructional and classroom

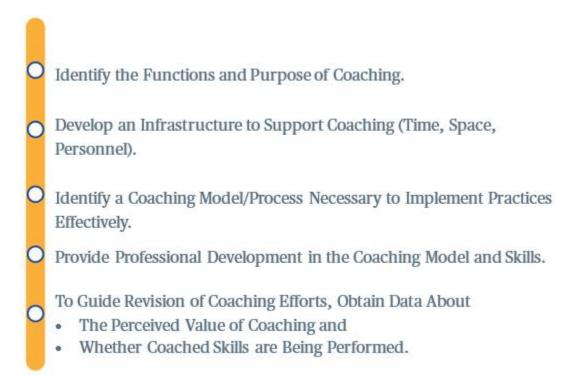
management strategies is an effective practice. See Appendix C for detailed descriptions of the intervention features and findings from each study informing this recommendation.

How to Carry Out the Recommendation

This section describes strategies, examples, and tools available for coaches to support implementation of evidence-based instructional and classroom management strategies. All figures and mentions of specific coaching strategies in Recommendation 3 are offered as examples only and should not be read as endorsements of specific products or approaches.

The guidance below is informed by the studies that support the recommendation, as well as the expert panel's expertise and knowledge of resources and strategies available to help implement the recommendation.

FIGURE 3.1: Steps to Implement Recommendation 3



1. Identify the functions and purpose of coaching.

Implementing any new practice with fidelity and sustaining implementation over time may require effective coaching to support educators' learning as they translate implementation plans into actionable steps. Three main contexts for coaching are necessary in schools: systems coaching, coaching teams or groups, and individual coaching (see **Figure 3.2**).

- System coaching focuses on building organizational support (policies, practices, and resources) by creating consistent and sustainable systems, so school staff can implement practices with fidelity. Coaches can help district and school administrators understand the intervention's core components and the systems, features, and infrastructure needed for successful, sustained implementation. Coaches can guide district personnel to ensure necessary professional development at the team and individual levels and to ensure organizational changes that support implementation of new practices. This level of coaching requires fluency with implementation science¹¹² and frameworks. (See **Recommendation 5** for more guidance on implementation science and frameworks.)
- Coaching teams or groups helps teams develop their collaboration and facilitation skills, establish team operating procedures, understand group dynamics as the team applies new skills in context, and solidify data-driven decision-making processes. While implementing evidence-based practices, coaches can guide teams on how to make the new practice fit their schools' and classrooms' communities, contexts, and cultural settings.
- Individual coaching focuses on skills acquisition and application in context
 after initial training activities. Coaches provide support and give performance
 feedback to educators to ensure use, fluency, confidence, and acceptable
 implementation and adoption of trained skills.

When planning for systems to support implementation, state, district, and school leaders may benefit from identifying adequate coaching capacity to support systems, teams/groups, and individual change. Each type of coaching serves a different purpose, and all three combine to help ensure that evidence-based practices can be implemented and sustained to improve student outcomes. To build coaching capacity, district and school leadership teams must understand and measure school staff

readiness and must tailor support based on readiness across all professional development activities. The <u>Coaching Inventory Discussion Tool</u> may help district and school leadership teams understand the current coaching infrastructure, identify which coaching functions currently exist, and identify where the gaps exist so that the team can develop a coaching service delivery plan. A coaching service delivery plan is a proactive approach to purposeful and supportive coaching and describes both the coach's and the practitioner's responsibilities, specifying the coaching elements that will promote quality service delivery through support for the system, team/group, or individual educator. The coaching service delivery plan serves as the basis for further professional development.¹¹³

Internal Coaching Support Regional/State Leadership Team STUDENT BENEFIT DISTRICT TEAM SCHOOL STAFF SCHOOL TEAM 3- to 5-year action plan Practices, data, systems Tier 1 (School-wide) Data plan Data plan Policy, funding Leadership Tier 2 (Small group) Leadership Tier 3 (Individual visibility, political Training, coaching, Training, coaching, student) content expertise, and content expertise, and Readiness, priority. Data systems evaluation evaluation commitment **External Coaching** Team **Support Support**

FIGURE 3.2: Coaching Contexts

SOURCE: Adapted from PBIS District Level Coaching Brief.

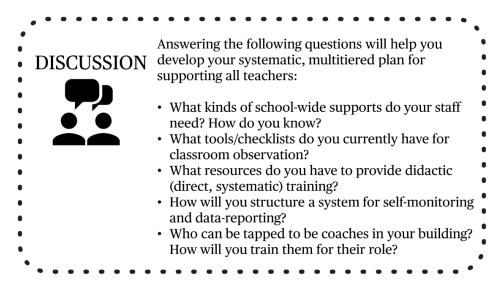
2. Develop an infrastructure to support coaching (e.g., time, space, personnel).

It is critical for districts to have an infrastructure that provides research-based, consistent, ongoing, convenient, sustainable, relevant, and differentiated coaching to all educators in the district or school.¹¹⁴ This infrastructure should include schedules that protect time for coaching, funding to support coaching activities (e.g., if

substitute teachers are needed to release teachers from classrooms) and clear delineation of which professionals are involved in the coaching process. This includes those with coaching in job responsibility, as well as educators in need of coaching with a clear method for identifying who will benefit from overall vs. individualized support (see **Figure 3.3** for help identifying the need for coaching).¹¹⁵

Providing quality coaching to staff will help ensure that interventions or practices are implemented with fidelity and sustained. The development of a coaching system to be applied throughout the school year is key to the success of training and ongoing support. The coaching process should first ensure that trust is established between coaches and educators. The panel recommends that a coaching service delivery plan–a written plan establishing the coaching process—should specifically outline the coaching supports provided to staff who carry out the program or practice. The coaching service delivery plan should outline (1) requirements for coaches to be experts in delivering the program or practice, (2) required frequency of coaching, and (3) coaching methods. In addition, the multidisciplinary team should conduct frequent review of a coach's adherence to the coaching plan at least three times a year. 116 As the multidisciplinary team uses data-driven decision-making and connects the action plan to the school and district mission, it is critical to engage all educators in planning and implementation, which ensures implementation fidelity and improved student academic/behavioral success. 117

FIGURE 3.3: Help Identify the Need for Coaching

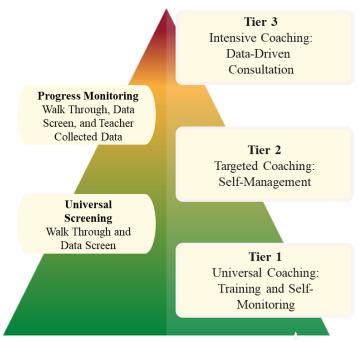


SOURCE: Adapted from Simonsen et al. (2014).

Before providing coaching-specific professional development, multidisciplinary teams should provide professional development activities involving explicit, organized initial training on implementing the evidence-based practices that coaching efforts are designed to influence. Following initial training, the district and school teams are encouraged to assess staff's current skills, experience, and existing practices, to help coaches ascertain the adult behaviors (e.g., instructional and classroom management practices) they need to influence.

Who needs coaching? Technology can be used to provide universally supportive coaching to all educators, while more expensive in-person consultations can be offered to those educators who are new or require additional support to implement effective instructional or classroom management strategies aligned with the school's needs. 118 For example, a three-tiered coaching support framework could be used for providing supports and a clear method for identifying which educators will benefit from each level of support. 119 This multi-tier system is informed by data and educators receive coaching based on data. All educators could receive universal coaching support (Tier 1) focused primarily on high-quality, indirect coaching; some educators could receive universal coaching plus limited coaching supports (Tier 2); and a few educators could receive all of the above plus intensive coaching supports (Tier 3). This model, the "triangle for teachers," could be a feasible way for schools to provide coaching to educators and staff (see Figure 3.4).

FIGURE 3.4: A Multi-Tier Coaching Model



SOURCE: Adapted from Simonsen et al. (2014).

Who provides coaching? Coaching can often be integrated into the job responsibilities of multiple professionals within a school or district, such as educators, administrators, related service providers, and school-based mental health practitioners. Although the majority of coaching efforts occur at the classroom level, the panel recommends developing infrastructure to support coaches at the district level. Specifically, districts should identify a single coaching service delivery plan and provide coordinators who can oversee training and monitoring of implementation fidelity, including procedures and coaching-specific skills (see **Recommendation 5** for additional discussion on the importance of district- and state-level coaching). See **Figure 3.5** for a list of questions that can help districts or schools develop a coaching service delivery plan.

FIGURE 3.5: Questions to Ask While Planning to Develop Coaching Service Delivery Plans

As your team engages in planning of the coaching service delivery methods and processes, consider the following:

- What are the concepts, skills, or areas to be coached?
- What coaching process or processes (e.g., direct observation, documentation review) will be used?
- How often will the coaching processed be used? How will the frequency be adjusted as practitioners or instructional staff gain experience and grow in their skill competency?
- What preparation is needed for the coaching process? For example, what data or documentation is to be collected or reviewed and is there a timeline for clear submission to the coach?
- What is the format of the post-meeting/post-event following the coaching process? For example, will the coach provide feedback during a face-to-face meeting with the practitioner or instructional staff or during a group reflection meeting?
- How will the coach document the feedback provided? Will feedback be verbal, written, or both?
- Is there a timeline for when the coach should provide the written documentation? For example, written documentation is to be provided within 72 hours after verbal feedback, quarterly, etc.
- How will we know coaching is effective? What data will be collected, and how will it be collected and analyzed for continuous improvement purposes?
- What is our plan for monitoring adherence to the coaching service delivery plan? By whom, how, how often, and when will the plan be reviewed?

SOURCE: Adapted from the National Implementation Research Network (NIRN, 2009).

3. Identify a coaching model/process necessary to implement practices effectively.

Educators, administrators, related service providers, and school-based mental health practitioners who engage in coaching should be taught specific skills to change adult behavior and to apply those skills in the context of the coaching process. However, the skills required to successfully influence adult behavior are distinct from the skills required to implement the instructional and classroom management strategies that coaching is designed to support. To date, little is known about what baseline skills or training make some coaches more effective than others. At a minimum, the panel believes an effective coach is skilled at developing and maintaining positive relationships with colleagues.

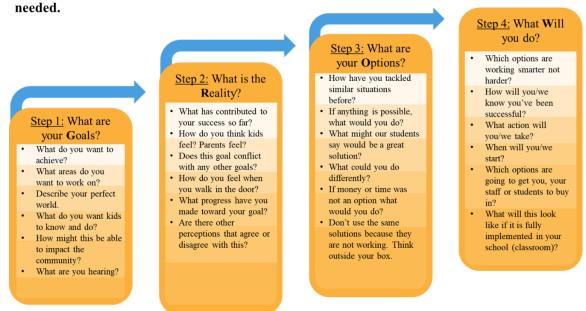
Individuals who coach need a process, as well as special skills, to motivate educators to change existing behavior. Learning to coach effectively takes time and effort, and not everyone is suited to coaching. Coaching skills should be developed using common approaches to imparting knowledge, ¹²¹ including the provision of training and ongoing support to dedicated coaches ¹²² and the development of infrastructure to support coaching at the district level. Along with a consistent coaching process, the panel recommends creating a training infrastructure that not only supports individuals who coach to follow the recommended process but also provides them with the skills needed to successfully navigate the coaching process with educators. Below, we recommend a few useful coaching models districts might consider.

The GROW coaching model, represented in **Figure 3.6**, provides a simple but proven framework to develop a coaching service delivery plan that is meaningful, relevant, and impactful.¹²³

FIGURE 3.6: The GROW Coaching Model by John Whitmore and Graham Alexander

The Key to GROW

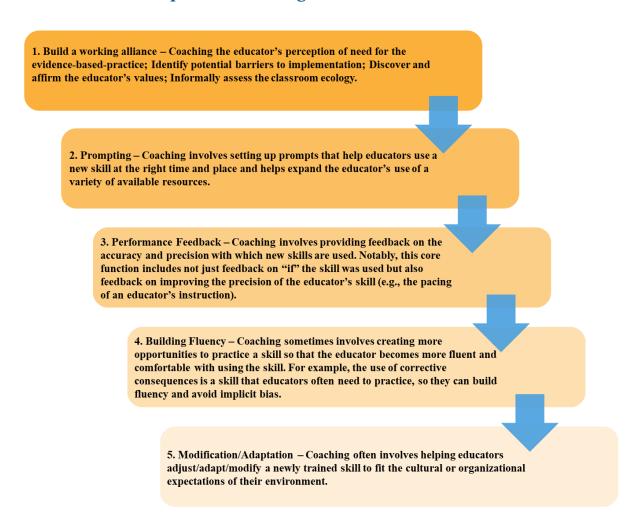
The key to using GROW successfully is first to spend sufficient time exploring "G" until the coachee sets a goal that is both inspirational and challenging for them. Then, you must move *flexibly* through the sequence, using your intuition, including revisiting the goal if



SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

A second coaching model is organized by function. In this framework, after initial teaching of practices to educators, coaching involves building a working alliance, prompting, performance feedback, building fluency, and modification/adaptation (see **Figure 3.7**). 124

FIGURE 3.7: Five Steps for a Coaching Framework

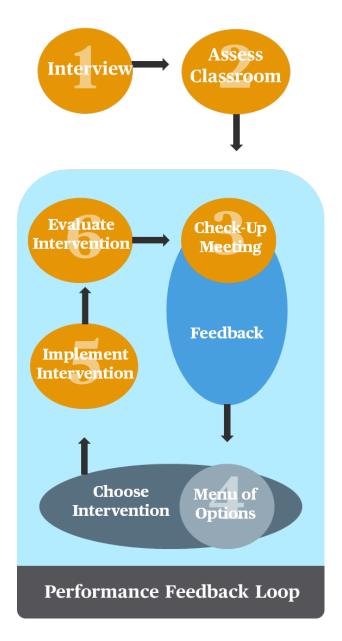


SOURCE: Adapted from Massar (2018).

Another coaching model is promoted by the Classroom Check-up.¹²⁵ As seen in **Figure 3.8**, the Classroom Check-Up involves an initial teacher interview and classroom assessment, followed by a multi-step performance feedback loop. Another useful model is the Motivational Interviewing Navigation Guide¹²⁶ (see **Figure 3.9**). The navigation guide provides a 5-step coaching process that includes a values discovery interview, assessment of current practices (which can be any evidence-based

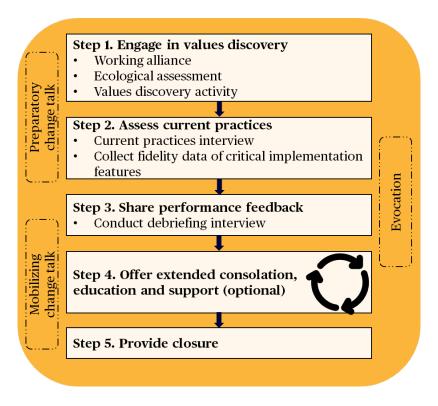
instructional or classroom management practice or strategy), a performance feedback meeting, extended support, and closure. The references to preparatory change talk, mobilizing change talk, and evocation in **Figure 3.11** are described in the next section. Both the Classroom Check-Up and Motivational Interviewing Navigation Guide are informed by motivational interviewing concepts.¹²⁷ The skills associated with this practice are also described in the next section.

FIGURE 3.8: Classroom Check-Up Coaching Process



SOURCE: Adapted from the Coaching Process on Classroom Check-Up Website.

FIGURE 3.9: The Motivational Interviewing Navigation Guide



SOURCE: Adapted from Frey et al. (2013b); Lee et al. (2014) and Frey et al. (2020).

Another useful practice-based coaching framework (see Snyder et al., 2022) is used in BEST in CLASS.¹²⁸ BEST in CLASS-Elementary is an intervention that consists of workshops, teaching manuals, and practice-based coaching to help educators learn effective practices to enhance home-to-school partnerships and support positive behavioral and academic outcomes for students with challenging classroom behavior.

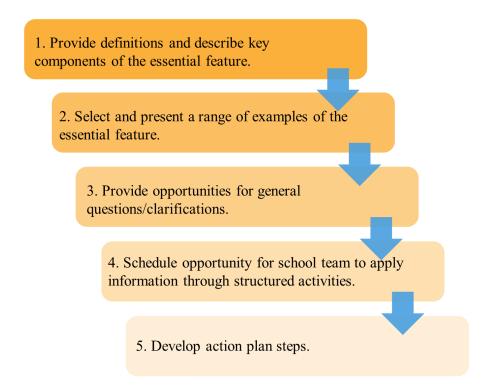
4. Provide professional development in the coaching model and skills.

It is critically important that professional coaches train educators to deliver content by teaching and modeling best practices that lead to educators developing fluency with delivering the essential components of the evidence-based practice. Because educators must learn when, how, and with whom to use new skills and practices, the expert panel recommends that the initial training be organized into short teaching modules, with clearly defined activities and outcomes designed to lead to actionable steps for individual implementation. Also, the panel recommends following the basic steps listed in **Figure 3.10**.

This initial training should

- provide information related to the theory and underlying values of the practice,
- use training processes grounded in adult learning theory to actively engage participants,
- introduce the components of and rationales for key practices, and
- provide opportunities to practice new skills and receive feedback in a safe and supportive training environment.

FIGURE 3.10: Basic Steps to Help Organize Initial Training



SOURCE: Adapted from Lewis et al. (2016).

Individuals who coach can also encourage new educators to implement behavioral practices by training the new educators before the school year starts. Coaching individuals can also provide ongoing support throughout the school year, until staff/educators demonstrate mastery of the new skill.

Research is just starting to identify the specific skills that individuals need to have for their coaching to be effective as a professional development strategy. There is a substantial need for coaching models that clearly and comprehensively specify (a) the conversational skills individuals must have for their coaching to successfully influence teacher implementation of effective practices; (b) the scope and sequence of professional development systems capable of equipping individuals with these conversational skills; and (c) skill-based proficiency standards.¹²⁹

As noted earlier, the Classroom Check-Up and the Motivational Interviewing Navigation Guide are informed by motivational interviewing. Motivational interviewing-based models are distinct from other coaching models because the skills associated with this practice are well defined, and extensive literature informs the procedures required to teach people to use these skills proficiently. Furthermore, a comprehensive theory associated with motivational interviewing describes the mechanisms of change within the coaching process. ¹³⁰

Three core ingredients, described in **Figure 3.11**, make motivational interviewing effective:¹³¹ the technical component, the relational component, and (the absence of) motivational interviewing-inconsistent behaviors (confrontation and persuasion). These three active ingredients, combined in the context of overlapping and recursive processes that include *engaging*, *focusing*, *evoking*, and *planning*, define motivational interviewing fidelity (see **Figure 3.11**). These three ingredients should be central to any definition of motivational interviewing quality.

FIGURE 3.11: Ingredients of Motivational Interviewing



The **technical component** refers to the practitioner's ability to shape the conversation, so the practitioner is evoking participant change talk (i.e., language that supports a shift from the status quo) of greater depth, strength, and frequency, while acknowledging but not reinforcing sustain talk, or language that supports the status quo. The practitioner performs conversational shaping by intentionally and strategically utilizing core motivational interviewing skills, which are represented by the acronym OARS (i.e., open-ended questions, affirmations, reflections, and summaries) to strengthen the participant's motivation for change.



The **relational component** consists of accurate empathy, respect for participant autonomy, and egalitarian collaboration. The relational component is the way practitioners use the OARS skills, often referred to as the motivational interviewing spirit.



Motivational interviewing-inconsistent behavior refers to the use of confrontation (e.g., lecturing, shaming, coaxing, arguing) and persuasion (e.g., being overly directive with the participant or offering unsolicited advice or advice without permission).

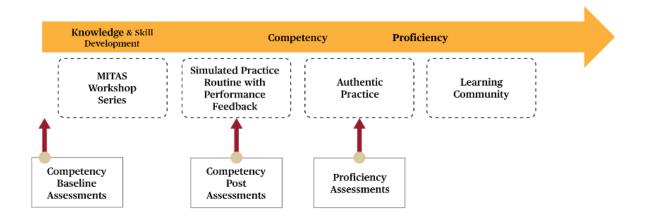
SOURCE: Adapted from Miller & Moyers (2017); Miller & Rollnick (2012); Magill et al. (2014) and Miller & Rose (2009).

Research on learning motivational interviewing reveals that skillful use requires expert-led workshops followed by objective evaluation and reflection. Self-study or workshop-only training efforts are not sufficient to change educator behavior because they only lead to perceptual or attitudinal changes and some initial skill development instead of fluency, irrespective of the setting where the training participants are being prepared to practice motivational interviewing. Learning opportunities must include skills related to both the relational and the technical components of motivational interviewing, as well as strategies to help practitioners avoid inconsistent practices in motivational interviewing.

The **Motivational Interviewing Network of Trainers (MINT)** is a method to create a pool of qualified instructors using a Train the Trainers model. Accessing the <u>MINT</u> website to find a qualified trainer is a useful starting point for school staff interested in being trained through a motivational interviewing expert or Train the Trainer approach. The panel believes that it is far more useful to be trained by someone who has school-based experience and who is able to contextualize motivational interviewing in interactions relevant to school-based personnel.

The Motivational Interviewing Training and Assessment System (MITAS) is a comprehensive professional development system that closely matches training procedures used to train skilled practitioners in the field of substance and alcohol misuse; this system has been adapted to coach educators in school-based application. As depicted in Figure 3.12, the MITAS consists of multiple workshops, a simulated practice routine, authentic practice, and a learning community. Workshop delivery modules can be flexible (in person or virtual), depending on participant needs, and can be contextualized to represent school situations. The MITAS is a useful resource for skilled motivational interviewing practitioners who want to train other school-based personnel. Districts or schools seeking more information may wish to review Frey et al. (2017), which summarizes the guiding principles and objectives of motivational interviewing workshops. Furthermore, many of the materials needed to use the MITAS training can be found on the Responsible Use of Motivational Interviewing in Schools website, including materials to support motivational interviewing skills for coaches.

FIGURE 3.12: The MITAS Model

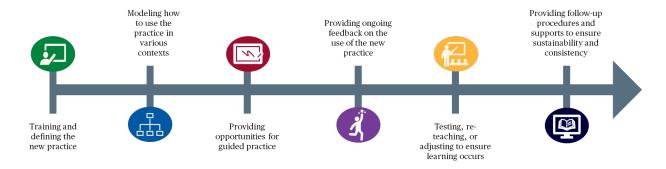


SOURCE: Adapted from Frey et al. (2017).

The <u>Classroom Check-Up</u> website also provides useful resources for developing individuals' coaching knowledge and skills, so they can support educators in effective classroom management.

Additionally, coaching should follow the same steps suggested when students are taught (see **Figure 3.13**, which follows steps similar to **Figure 1.1**).

FIGURE 3.13: Basic Teaching Model for Coaching



Finally, the following resources are available to support coaching personnel: (1) <u>PBIS</u> resources for coaches and (2) the <u>PBIS Cultural Responsiveness Field Guide:</u> Resources for Trainers and Coaches. The latter resource is for coaching personal who are working with school teams to implement culturally responsive practices that systemically enhance equity in school discipline.¹³⁹

5. To guide revision of coaching efforts, obtain data about (a) the perceived value of coaching, (b) the fidelity of the coaching, and (c) the extent to which the coached skills are being performed.

A robust coaching system relies on multiple data sources to assess the effectiveness of coaching activities, including direct observations, implementation fidelity measures, and practitioner satisfaction surveys. 140 Ongoing evaluation of coaching efforts using quarterly performance assessments should combine the aforementioned data sources to assess coaching effectiveness related to practitioner implementation fidelity, coaching fidelity, and the perceived value of coaching. Direct classroom observations¹⁴¹ in combination with implementation fidelity measures (as discussed in detail in **Recommendations 1 and 4**) can be used to assess whether an educator is practicing their newly developed skills through coaching with fidelity. Similarly, coaching fidelity data can be collected through self-reports or direct observations of coaching activities. Examples of self-report data can include a checklist of coaching components, such as modeling and/or prompting, observational data collection, videotaping the educators' implementation of practices during the selected activity, and completing anecdotal notes. Furthermore, trained observers can collect observational data on coaching activities using coaching fidelity forms such as the BEST in CLASS Coaching Integrity form (see Figure 3.14). For motivational interviewing-informed coaching models, the panel recommends the Motivational Interviewing Treatment Integrity (MITI) tool, 142 which enables examination of motivational interviewing fidelity through coding of 4 global scores, 10 behavior counts, and 5 summary scores. Finally, surveys can capture critical data on the perceived value of coaching by measuring the extent to which the coaching intervention was perceived as socially valid to the participating educators. 143

Using evidence-based instructional and classroom management strategies provides an additional advantage because these strategies have measures that define whether the intervention is being implemented with fidelity. Although these fidelity measures historically have been used in research settings, they can be modified for use within practice settings.¹⁴⁴

Data on the perceived value of coaching and coaching effectiveness should inform subsequent efforts to revise coaching efforts. These data can drive revisions and updates to the coaching service delivery plan to inform school-wide coaching efforts,

or to provide individualized coaching support to educators who are implementing effective teaching strategies. As discussed in **Recommendations 4 and 5**, multidisciplinary, representative leadership teams in schools, districts, and states are encouraged to include in their comprehensive action plans strategies for organizing, analyzing, and making data-based decisions on coaching activities relative to their impact on educator implementation and student outcomes.

A Staff Handbook, as illustrated in **Figure 3.15**, could include clear definitions of the process from initial and ongoing training, self-monitoring and -assessment, performance feedback, retooling and technical assistance, and planned improvements. This handbook can act as a reference that organizes and documents school-wide data, systems, and practices and can serve as an accessible resource.

FIGURE 3.14: BEST in CLASS Coaching Integrity Observation Report

Teacher ID:	Coach ID:	Date:	Week:	Coder ID:	Time Point:						
		Refle	ection & Feedbac	k				Not at all	Somewhat	Extens	sive
Did the coach						$\overline{}$		0 1	2	3	4
	o self-reflect on his/h	er use of the s	trategy?								
2. Share video and	or anecdotal notes wi	ith varied, rele	evant examples of	strategies for each	focal student?						
3. Clearly explain g	raphical data and chec	k for underst	anding for each fo	ocal student in rela	tion to previous goal?						
						Total:					
		P	ractice Review					Not at	Somewhat	Extens	sive
Dild								all	2		
Did the coach	11 1 11	1 6		11 1 1 1	2			0 1	2	3	4
	e, explain, and provide its of high quality use f				(
2. Snare componen	its of nigh quality use i	or the practic	e used over the la	st week:		Total:					
		N F	ractice Instructi			I otal:		Not at	Somewhat	Extens	rima
		New r	ractice instructi	on				all	Somewhat	Extens	sive
Did the coach							N/A	0 1	2	3	4
	e, explain, and provide	examples of	the practice being	introduced?					_		
	ts of high quality use f				xt of the teacher's clas	sroom?					
	'''					Total:					
	5	Shared Goal	Setting & Decisio	n Making				Not at all	Somewhat	Extens	sive
Did the coach								0 1	2	3	4
1. Generate goal(s)	that address quantity	and quality?									
2. Create goal(s) th	at are specific and mea	asurable?									
	ussion to identify supp			meet his/her goal?							
*4. Review method	ls to measure progres:	s towards me	eting goals?								
						Total:					
		Home	-School Partners	hip				Not at all	Somewhat	Extens	sive
Did the coach							N/A	0 1	2	3	4
	r reflection of home-sc										
	quality way with teach			ig home-school pa	rtnership, especially ir	1					
addressing any bar	riers (i.e. problem-sol	ving process,	CARES Model)?								
						Total:					
			General Items					Not at all	Somewhat	Extens	sive
Did the coach							N/A	0 1	2	3	4
	and to all teacher quest	tions related	to the implements	tion of practice?			,				
	guage during the coacl										
	manual during the me										
*4.Discuss linking											
	er summary of self-re	flection, feedl	oack, and new goa	l(s)?							
	"					Total:					
		Qua	lity Collaboration	n				Not at all	Somewhat	Extens	sive
Did the coach								0 1	2	3	4
1. Facilitate joint ac	tion planning?										
	ion focused on specifi	c teacher/stu	dent behaviors?								
Check for unders	standing and adjust ex			teacher need?							
	standing and adjust ex udgmental attitude to	planations/e	xamples based on	teacher need?		-+					
	udgmental attitude tov	planations/e	xamples based on	teacher need?							

SOURCE: Adapted from Sutherland et al. (2015).

FIGURE 3.15: Details to Include in Handbook for the Coaching Service Delivery Plan

Develop a year-long coaching schedule within the workday for all teachers and staff outlines:

- a. Time and place
- b. Schedule of topics (suggestions include):
 - i. Accessing resources necessary for tiered supports
 - ii. Self monitoring implementation
 - iii. Implementing essential skills of coaching and model for coaching
 - iv. Implementing essential components of tiered supports (e.g., teaching, reinforcing, discouraging, data collection, student self-monitoring)
 - v. Implementing effective classroom practices (e.g. reinforcing, active supervision)
- c. Identify expertise to provide coaching
- d. Identify expertise or experts for coaching

Implement your year-long coaching schedule and consistently communicate aggregated school-wide data to demonstrate growth in proficiency in implementing effective practices and improved student outcomes.

SOURCE: Adapted from 2019-2020 Missouri SW-PBS *Tier 1 Implementation Guide* (Missouri Schoolwide Positive Behavior Support, 2019).

Potential Obstacles and the Panel's Advice

OBSTACLE: There is not enough time and infrastructure to build the capacity to support coaching.

PANEL'S ADVICE: Although it would be ideal to coach all school staff all the time, providing coaching at this effort level is rarely feasible or sustainable due to time, cost, and logistical concerns. To initiate those early discussions about the importance of coaching and the facilitative supports and systems, administrators need to consider the NIRN <u>Coaching System Development worksheet</u>, which may be a useful tool for ensuring a systemic commitment to coaching. The panel recommends that schools should

- actively develop and implement coaching service delivery plans that detail how often, where, when, with whom, and why coaching will occur;
- use multiple data sources to provide feedback to practitioners, including assessments that start with interviews and involve direct classroom observations;

- leverage engagement techniques, like motivational interviewing,¹⁴⁵ to foster educator buy-in for the change process;
- use data-driven decision-making from coaches to inform training improvements and improve organizational supports;¹⁴⁶ and
- establish professional learning communities where district coaches can meet regularly (e.g., monthly) to solve problems and develop their own coaching skills.

Increasingly, district- and state-wide initiatives are being used to support the dissemination of training and coaching systems. Readers can refer to **Recommendation 5** for information on how districts and states can invest in coaching and other implementation drivers to ensure that educators, staff, and administrators have the capabilities to implement practices as intended.

OBSTACLE: Most educators, administrators, related service providers, and school-based mental health practitioners are not prepared to coach or do not have the right skillset to coach, so districts need to have a formal, centralized onboarding process to build capacity for effective coaching.

PANEL'S ADVICE: Individuals who coach need special skills to motivate educators to change existing behavior. Learning to coach effectively takes time and effort, and not everyone is suited to coaching. These skills should be developed using common approaches to imparting knowledge, ¹⁴⁷ including providing training and ongoing support to the dedicated coaches ¹⁴⁸ and developing the infrastructure to support coaching at the district level. See **Figure 3.6** for the GROW coaching model, which provides a simple but established framework to develop a coaching method that is meaningful, relevant, and impactful. ¹⁴⁹ For example, a psychologist or a former educator at the school can be trained using the GROW coaching model.

Schools seeking more information may wish to access resources that explore some best practices for coaches. Recent emerging evidence reveals that coach-educator alliances are crucial to improved implementation. As a result, training for coaches should include tools and resources to build trust and relationships with educators and staff, as well as to engage educators who might be initially resistant to change. The Classroom Check-Up website and First Step Classroom Check-Up Resource Manual

provide additional useful resources for individuals to develop their coaching knowledge and skills to support educators in effective classroom management.

OBSTACLE: Dedicated expert coaches for all educators in the school can be expensive, especially for schools and districts lacking resources.

PANEL'S ADVICE: School-based coaching is a promising approach to professional development for educators; however, this kind of in-person, dedicated coaching for all educators may not be feasible for schools and districts that lack resources. The panel suggests starting with professional development for all educators and considering differential supports for a few based on each educator's implementation and needs (see **Figure 3.4**). Educators can then receive coaching in gradual approximations through step-by-step consultation, ending with an individual consultation.¹⁵¹ Schools lacking in resources could reallocate existing resources to build a robust infrastructure that prioritizes coaching. For example, schools can repurpose roles and responsibilities of existing staff to train a school-based coach. Another approach would be to train a small multidisciplinary team to learn the key practices for improvement, and these team members can then function as coaches and use staff meetings to inform groups of the activities conducted, as well as provide support and encouragement as needed. The panel recommends that, while school multidisciplinary teams participate in the training and after they master the basic material, teams should meet approximately once per month to review training content and set up a regular process of reviewing and refining goals (initial goals are developed during training) and other site-based activities. A clear and consistent format and operating procedure for these meetings needs to be specified (see Team-Initiated Problem Solving for details¹⁵²).

RECOMMENDATION 4: Collect, Summarize, and Use Fidelity and Student Outcome Data at All Levels for Iterative Decision-Making and Problem-Solving by Stakeholders.

Compared to schools that do not include data in decision-making processes, schools and districts that utilize data to make decisions are more effective and efficient in addressing student challenges. The collection and analysis of fidelity and outcome data allows schools and districts to diagnose problems, determine which practices are most effective, determine whether selected practices are being implemented with fidelity and, ultimately, assess how and if practices are improving student outcomes. As such, schools and districts should collect and use fidelity data to assess and monitor whether practices are being implemented as intended. Student outcome data, including office discipline referrals, suspensions, and school climate, can be used to assess whether practices are meeting student needs.

Recommendations 1 and 2 highlight the importance of establishing multidisciplinary representative teams to lead the implementation of prosocial practices within elementary schools, along with the importance of developing systems for monitoring and adjusting behavioral expectations. Multidisciplinary representative teams use data to monitor and adjust behavioral expectations and present outcome and fidelity data to stakeholders to provide leadership on developing, implementing, and sustaining prosocial practices. This recommendation discusses how multidisciplinary problem-solving teams—consisting of members who have the requisite experience and expertise in working with data and training in structured decision-making processes—can support multidisciplinary representative teams by utilizing fidelity and outcome data to engage in iterative decision-making and problem-solving.

A problem-solving team and outcome- and fidelity-focused data systems are foundational elements for incorporating data into decision-making processes. Problem-solving teams are responsible for analyzing data to identify behavior problems, developing solutions, monitoring implementation fidelity, and examining the effectiveness of practices for improving student outcomes. A key benefit of teams is their ability to incorporate multiple perspectives, including those of administrators,

specialists, and educators, in order to identify comprehensive solutions. To fulfill this critical role, it is important that problem-solving teams have the responsibility and authority to use data and follow protocols that provide a structured approach for decision-making based on given data. Whenever possible, teams should be trained on structured decision-making processes; research demonstrates that trained teams show higher levels of problem-solving and, critically, that improved problem-solving has a positive impact on student outcomes.¹⁵⁴

To support the efforts of problem-solving teams, outcome and fidelity data systems must provide the necessary data, in the proper format, at the right time. Problem-solving teams, in consultation with the multidisciplinary representative teams and school and district leaders, can evaluate electronic data management systems with the capacity for data entry, reporting, and analysis that best meets their need to use data efficiently and effectively to answer questions posed by the problem-solving team and other stakeholders. Once the data systems are in place, problem-solving teams can use their decision-making protocols to collect, analyze, and utilize data in a routine, formal, and direct manner. Key questions for problem-solving teams to consider include the following:

- a. What topic or problem needs to be addressed? When, where, and how should that topic or problem be addressed?
- b. What intervention or practice might best address the topic or problem?
- c. How well have administrators, educators, and support staff been prepared to implement the intervention or practice?
- d. How well is the intervention or practice being implemented (i.e., fidelity)?
- e. How well are students responding (i.e., progress monitoring)?
- f. What adjustments are needed to improve implementation fidelity and student responsiveness?

Utilizing data to guide decision-making and problem-solving approaches may involve a significant shift in policies and procedures for some schools and districts. As such, problem-solving teams, alongside the multidisciplinary teams, can remind stakeholders that the significant time, training, and resources invested in implementing prosocial practices may necessitate a longer passage of time before the implementation of these practices results in positive, permanent change that improves student outcomes and promotes a positive school-wide social culture.

Throughout the early stages of the implementation process, problem-solving and multidisciplinary representative teams and school or district leadership may want to regularly emphasize the positives of data collection while also using data to demonstrate progress and celebrate successes.

Recommendation 4 was informed by five studies of the effectiveness of using fidelity and student outcome data to engage in iterative decision-making and problem-solving. Three of the studies meet WWC group design standards without reservations, ¹⁵⁶ while the other two studies WWC group design standards with reservations. ¹⁵⁷ In all five of the studies used to support Recommendation 4, collecting, summarizing, and using fidelity and outcome data to engage in iterative decision-making and problem-solving was a major component of the tested intervention.

The panel has confidence in the research suggesting that collecting, summarizing, and using fidelity and outcome data is an effective practice. See Appendix C for detailed descriptions of the intervention features and findings from each study informing this recommendation.

How to Carry Out the Recommendation

This section describes strategies, examples, and tools available for collecting, summarizing, and using fidelity and outcome data to engage in iterative decision-making and problem-solving. All figures and mentions of specific strategies in Recommendation 4 are offered as examples only and should not be read as endorsements of specific approaches or products.

The guidance below is informed by the studies that support the recommendation, as well as the expert panel's expertise and knowledge of resources and strategies available to help implement the recommendation.

FIGURE 4.1: Steps to Implement Recommendation 4

Establish a multidisciplinary, problem-solving team focused on promoting prosocial behavior.
Ensure that the requisite data systems are in place for regularly collecting, reporting, and analyzing fidelity and outcome data.
Identify problems requiring a solution.
Identify a goal and solution for resolving the problem.
Implement and monitor the proposed solution.
Monitor the solution's impact and decide next steps.

1. Establish a multidisciplinary, problem-solving team focused on promoting prosocial behavior.

Multidisciplinary representative teams should establish a problem-solving team that will use data to identify and analyze problems, identify solutions and the associated implementation processes to enable those solutions, and evaluate the effectiveness of the solutions related to student outcomes. As with the multidisciplinary representative team, the membership of the problem-solving team should incorporate diverse stakeholder perspectives. The establishment of a multidisciplinary, problem-solving team should be preceded by the questions identified in **Figure 2.2.** of **Recommendation 2** to determine whether the multidisciplinary representative team, or a subset of its members, could fulfill the key roles of a problem-solving team. In particular, questions such as "Do you need a new team?" and "Do you need to add any additional members to your team?" will help to reduce duplication of efforts, minimize the burden on staff, and ensure that the problem-solving team consists of members

with diverse perspectives who have the requisite experience in working with data and engaging in structured decision-making processes.

Regularly scheduled meetings attended by all members of the problem-solving team provide a forum for teams to conduct the important work of using data-based decision-making to improve student outcomes. Given the meetings' importance, articulation of clearly defined roles and expectations regarding meeting attendance may be necessary to ensure that team members have a clear understanding of expectations. Frameworks such as Team-Initiated Problem-Solving (TIPS) offer a structured approach to conducting effective and efficient meetings through the use of consistent procedures, defined team member roles, and meeting minutes guides (see **Figure 4.2**). During the meetings, the team engages in an iterative, multi-step problem-solving process that involves the following components:

- Identify problems and corresponding goals
- Select solutions and accompanying implementation plans
- Implement solutions with a high degree of fidelity
- Monitor the impacts of solutions against their corresponding goals
- Make a decision based on summative evaluations

FIGURE 4.2: TIPS Meeting Minutes Guide

	Date	Time (begin an	d end) L	ocation	Fac	litator	Minute	Taker	Data	Analyst
Today's Meeting										
Next Meeting	111 111 W. 11 T. 11 T. 1 W. 11 I			oorner verroomle telle timberel		27000-0000		- process viV illoso		
Team Members & Atte	ndance (Place	"X" to left of name	if present)							
			<u> </u>		<u> </u>					
Today's Agenda Items:	5						Agenda Ite	ms for N	ext Meeting	
1.			4.				1.			
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3.			6.				3.			
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SOURCE: Adapted from Todd et al. (2015).

2. Ensure that the requisite data systems are in place for regularly collecting, reporting, and analyzing fidelity and outcome data.

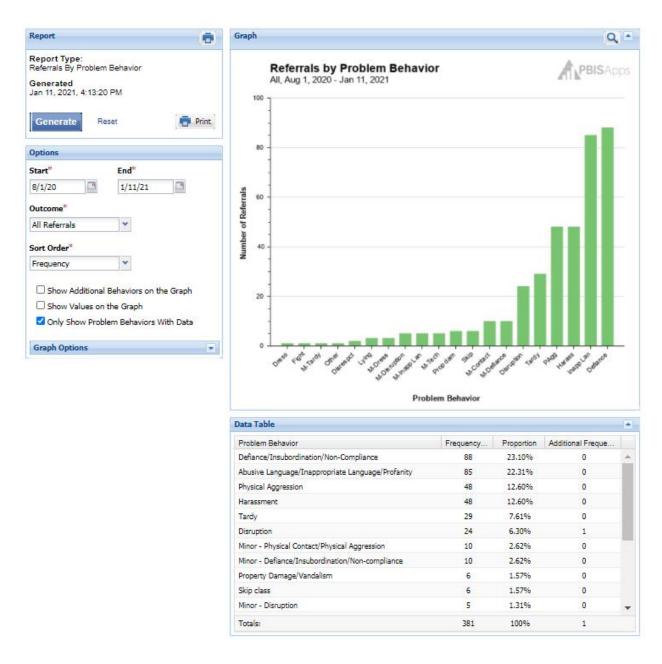
Multidisciplinary problem-solving teams require access to data systems that will allow them to view multiple data sources to define a problem precisely and build a practical solution. Data systems that provide relevant, usable, valid, and accessible data for identifying that a problem exists and that allow problem-solving teams to drill down at multiple levels¹⁵⁸ to precisely define specific problems are vital for informing decision-making, monitoring progress, and engaging in action planning. Moreover, data systems that prioritize efficiency of data entry and ease of data reporting are likely to have significant appeal for school and district personnel.

Implementation fidelity data systems can support teams in regularly collecting fidelity data using paper or electronic versions of validated fidelity tools. ¹⁵⁹ Further details are provided in subsequent steps about a variety of tools that exist for assessing practice implementation fidelity. ¹⁶⁰ Continuous assessment of implementation fidelity allows teams to monitor whether practices are implemented with high fidelity and to quickly address instances in which processes may need to be revised to ensure high fidelity.

Data systems also require sufficient capacity for regularly collecting and analyzing the requisite data on student behavior, office disciplinary referrals, outcomes, and school climate. When possible, sufficient details should be collected about office disciplinary referrals. Sufficient detail means including data elements such as dates, names of students and referring staff, location, behavior and perceived motivation, and actions taken; these details will support teams in examining implementation fidelity and the effectiveness of practices. In addition, data systems that generate efficient, modernized, and accessible reports on outcome data support problem-solving teams in effectively identifying problems. Finally, data system features for easily disaggregating data by race and ethnicity offer a valuable tool for examining the enduring challenge of disproportionality in discipline.

Figures 4.3 and 4.4 provide examples of the types of data reports that are likely to meet the needs of problem-solving teams. **Figure 4.3** provides an example of a report that a problem-solving team could use to determine whether problem behaviors were too frequent, and this report could inform the team's subsequent efforts to examine the problem, identify associated goals and solutions, and implement and monitor the solution's impacts. **Figure 4.4** provides a pair of examples, ranging from the simple to the more advanced, with key metrics (e.g., risk ratios) that a problem-solving team could utilize to compare rates of discipline disproportionality across racial and ethnic groups.

FIGURE 4.3: Example of a Problem Behavior Report from the School-Wide Information System¹⁶¹



SOURCE: Adapted from May et al. (2021).

FIGURE 4.4: Examples of Reports That Problem-Solving Teams Can Use to Examine Discipline Disproportionality¹⁶²

	# of Enrolled Students	# of Students with Referrals	# of Students within Ethnicity with Referrals
Native	5	2	40.00%
Asian	21	10	47.62%
Black	70	41	58.57%
Latino	123	101	82.11%
Pacific	5	3	60.00%
White	255	165	64.71%
Unknown	0	0	0.00%
Not Listed	0	0	0.00%
Multi-racial	21	14	66.67%

Instructions for use: Enter data for cells highlighted in blue										
Student Enrollment by Race	Black	Native	Latino	Asian	Pacific Islander	Multiracial				
	70	5	123	21	5	21				
Office Discipline Referral	Black	Native	Latino	Asian	Pacific Islander	Multiracial				
Office Discipline Referral by Race (# of students with ODR)	41	2	101	10	3	14				
% age of enrolled students with ODRs by race	0.59	0.40	0.82	0.48	0.60	0.67				
Risk Ratio for ODR	0.91	0.62	1.27	0.74	0.93	1.03				

SOURCE: Adapted from McIntosh et al. (2014).

${\it 3. Identify problems requiring a solution.}$

With a multidisciplinary problem-solving team and the requisite data systems to collect data consistently, schools can engage in robust, data-driven problem-solving approaches. Employing a structured approach to problem identification will allow teams to precisely identify the problem¹⁶³ they need to solve. As they undertake a

structured approach to problem-solving, teams may want to consider asking the "Big 6 Questions About Problem Behaviors" identified in **Recommendation 2**:

- 1. What types of problem behaviors are occurring?
- 2. **How** often do these problem behaviors occur?
- 3. Where are the problem behaviors occurring?
- 4. When are the problem behaviors occurring?
- 5. **Who** are the students experiencing the behavior problems?
- **6.** Why does the problem behavior continue to occur in these situations?

Answering these questions will allow the team to clearly describe the nature of the problem and justify its importance. Teams can then begin to consider goals and identify solutions for resolving the problem.

4. Identify a goal and solution for resolving the problem.

After precisely defining the problem, problem-solving teams can then identify a goal for resolving the problem. Key factors for teams to consider when setting goals include describing what success looks like, how to know when a problem has been resolved, and the estimated amount of time required to achieve the goal. Setting realistic and achievable goals is important, and teams may want to ensure that they develop *SMART* goals embodying the following characteristics:

- Specific: What will be accomplished? What actions will be taken?
- Measurable: What are the data used to measure the goal?
- Achievable: Is the goal attainable? Does the team have the necessary skills and resources?
- Relevant: Why is the result important? How does the goal align with broader goals?
- Time-bound: What is the timeline for achieving the goal?

After identifying a goal, the next step consists of identifying evidence-based solutions for addressing the problem and achieving the stated goal. During this process, teams brainstorm and evaluate potential solutions. Factors that teams may want to consider when discussing solutions include the following:¹⁶⁴

- Prevention strategies
- Instructional approaches

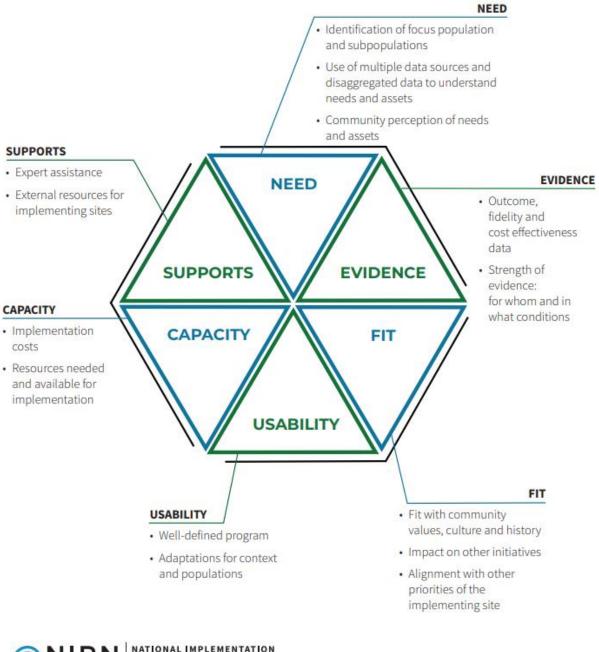
- Opportunities for recognizing desired behaviors
- Approaches to stopping unwanted behaviors
- Strategies for delivering consequences for unwanted behaviors

Whenever possible, potential solutions should be supported by the best-available evidence that documents meaningful change in student outcomes in similar settings. Evaluating various solutions is a complex process; exploration and planning tools, such as the Hexagon Discussion and Analysis Tool¹⁶⁵ (see **Figure 4.5**), offer teams a structured approach to evaluating new and existing practices for promoting prosocial behavior. These planning tools guide teams through this complex process by assessing the associated evidence, supports, and usability of a proposed solution while also assessing the extent to which the solution aligns with population needs, fit, and capacity. Throughout their exploration, teams may identify a number of potential solutions, but they should consider implementing a few targeted and specific solutions rather than too many solutions that cannot be readily maintained.¹⁶⁶

FIGURE 4.5: The Hexagon Discussion and Analysis Tool

The Hexagon: An Exploration Tool

The Hexagon can be used as a planning tool to guide selection and assess the fit and feasibility of potential programs and practices for use. It includes three **program indicators** and three **implementating site** indicators.





SOURCE: Metz and Louison (2019).

5. Implement and monitor the proposed solution.

After identifying a proposed solution, teams should develop a detailed plan for implementing and sustaining the associated practices. This process involves identifying and documenting the implementation steps, including the associated timeline and who is responsible for various components of the plan. The plan should also clearly articulate the requirements for high implementation fidelity to ensure that the necessary structures and systems are in place to support fidelity and guarantee that students experience the maximum benefits associated with the highest degree of implementation fidelity. Depending on the scope of the problem, teams may need to develop a multiyear action plan for implementing and monitoring the intervention over the first year and at intermediate (i.e., 2 to 4 years) and long-term (i.e., 5 or more years) intervals.

Teams can utilize a variety of validated tools to monitor implementation fidelity. These tools collect data from multiple stakeholders to assess whether solutions are being implemented with high integrity and can provide an accountability mechanism for ensuring that schools are adhering to their action plans. Critically, these tools provide teams with the pivotal data required to support sustainability and subsequent scaling efforts. Table 4 provides a brief overview of prominent, valid, and reliable tools that can be used to assess implementation fidelity.

TABLE 4: Implementation Fidelity Tools

Tool	Number of Items	Intended Use	Respondents	Response Process	Frequency	Implementation Criteria
Benchmarks of Quality (Kincaid et al. 2010)	53	Initial assessment; annual evaluation; index for sustaining implementation fidelity; metric for recognizing high fidelity implementation	SWPBIS team members and internal or external coach	SWPBIS team and coach complete independently, then coach aggregates into final scores	Annually	70% on total
Implementation Phases Inventory (Bradshaw et al. 2009)	44	Track implementation of school-wide supports in a phased approach, consistent with the stages-of-change transtheoretical model	SWBPIS coach or external technical assistance provider	Coach or external technical assistance provider completes using their knowledge of the school	Semi-annually (October and April)	For a school to progress through the four successive phases, a score of 80% must be attained on each phase before moving to the next
PBIS Self-Assessment Survey (Sugai et al. 2000)	18 (School- Wide Systems scale)	Determine staff perceptions on fidelity; conduct needs assessment for next steps in implementation	All school staff members	Individual staff responses are averaged by school	Annually to triennially	80% on School-Wide Systems Implementation Average
School-wide Evaluation Tool (Horner et al. 2004)	28	Annual evaluation	External evaluator	Evaluator completes based on student and staff interviews, school walkthrough, and permanent product review	Annually	80% on both Behavioral Expectations Taught subscale and total
Team Implementation Checklist (Sugai et al. 2001)	22	Progress monitoring and action planning during initial implementation	SWPBIS team members	SWPBIS team completes collaboratively	3-4 times per year	80% on total
Tiered Fidelity Inventory (Algozzine et al. 2014)	15 (Tier 1 scale)	Progress monitoring, annual evaluation, and action planning	SWPBIS team members with external coach	Team and coach complete collaboratively based on student and staff interviews, school walkthrough, and permanent product review	At least annually	70% on Tier 1 scale

SOURCE: Adapted from Mercer et al. (2017) and Bradshaw et al. (2009).

Teams may want to consider several important factors while using implementation fidelity tools. 169 Using tools to obtain baseline data on the extent to which specific elements of a strategy or practice are in place can provide administrators, coaches, and trainers with valuable information about existing strengths and weaknesses of strategies and practices, and these individuals can use this information to target training efforts more effectively. **Recommendation 1** discussed the importance of conducting implementation fidelity checks on a regular basis (whether monthly, quarterly, or bi-annually) to monitor progress over time and determine whether practice components are being effectively maintained over time. Implementation fidelity data provide important feedback to teams and school personnel on the status of prosocial behavior practices. In addition, providing school personnel with summary and disaggregated fidelity data on a regular basis can help reduce the time required to achieve effective implementation. Fidelity data should be framed in a positive manner, and representative multidisciplinary teams may need to communicate to other stakeholders that the data demonstrate progress toward the stated goal. As such, the data provide opportunities to acknowledge high-quality implementation and recognize the school's accomplishment of various implementation steps.

6. Monitor the solution's impact and decide next steps.

In the final step, problem-solving teams utilize outcome data to determine whether the solution is having the desired impact on the outcome. The data should drive team decisions about whether the goal has been met, progress has been made, or the problem has gotten worse. Monitoring a solution's impact involves reviewing outcome data on a regular basis (e.g., monthly or quarterly). These data, in combination with fidelity data, provide an opportunity for teams to adjust the solution or its components as needed.

Summative evaluations conducted at the end of the action plan will allow teams to make a final assessment of whether the solution had the requisite impact and achieved the stated goal. Problem-solving teams, in consultation with multidisciplinary representative teams, will need to consider how to proceed based on the results of the summative evaluation. Successful solutions could warrant further discussions regarding sustainability and scaling.¹⁷⁰ In contrast, solutions that did not achieve the stated goal may require further discussion about whether the school

should continue working toward the goal, whether implementation was an issue, whether modifications may be needed to achieve success, or whether a goal should be further revised. Critically, the completion of this final step should be followed by a restarting of the problem-solving process, with the problem-solving team using data to identify new problems that require a solution.

Potential Obstacles and the Panel's Advice

OBSTACLE: There may be unintended consequences of data collection.

PANEL'S ADVICE: Data offer a variety of benefits for problem-solving processes and the ultimate pursuit of practices that promote prosocial behavior; however, student-or classroom-level data can have adverse impacts for students and their educators when accessed by unauthorized users or when improperly used by authorized users. Accordingly, educators and staff may be hesitant to collect data without assurances of how the data will be protected and shared with other stakeholders. Clear communication about the benefits of data collection, intended use of the data, and discussion of when the school collects official data for problem-solving can help address the justifiable concerns of educators and staff. Providing training on the data systems used to securely collect confidential data and report data at aggregated levels (e.g., by grade level) can instill confidence that data will only be used in a constructive and professional manner.

OBSTACLE: Data collected by educators and school staff may lack consistency.

PANEL'S ADVICE: Regularly scheduled, consistent collection of data can be a challenging endeavor across multiple stakeholders. For instance, some educators may elect to report only major behavior incidents, while others may only report minor incidents. Clear data collection standards and requirements are a foundational component for achieving data collection consistency. Problem-solving teams should strive for clear definitions of behavioral and student outcome data (e.g., office disciplinary referrals) so that educators and staff have a clear understanding of the requirements for collecting consistent and accurate data (see **Recommendation 2** for strategies for defining major and minor behavioral issues and consistently collecting these data). Additional coaching focused on data collection consistency can be a helpful resource for individuals struggling with collecting data consistently (refer to

Recommendation 3 for detailed information on how individualized coaching could be used to support consistent data collection).

Schools should seek to adopt user-friendly data systems that make the data entry process efficient and enjoyable to ensure that data are entered routinely and consistently. Data systems that combine ease of data reporting with options for aggregating and disaggregating data across key subpopulations and time periods (e.g., by race/ethnicity or grade level; or by monthly, quarterly, or annual time periods) can further ensure that data are reported consistently at all levels. The use of school-wide data systems, ¹⁷¹ such as the School-Wide Information System (SWIS), DIBELS, and aimswebPlus, can also help reinforce consistency by ensuring that data entry is standardized.

OBSTACLE: Increased data use may feel overwhelming and school personnel may not know where to begin.

PANEL'S ADVICE: Several approaches can ease schools into the process of using data and can help build support for the widespread use of data. Action plans or blueprints¹⁷² can offer an invaluable tool by breaking the process associated with increased data use into manageable steps. Another approach involves the use of user-friendly data collection tools,¹⁷³ such as the example in **Figure 4.6**, that allow educators and staff to share information on their practices or their perceptions about school climate. The user-friendly nature of these tools can underscore the utility of data collection and demonstrate the intended culture of increased data use.

FIGURE 4.6: Treatment Integrity for Elementary Settings (TIES) - Teacher Report Form

	acher's name: te:_	School:	Focal Student Name:				Too	lay's	
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	Treat	ment Integrity for Ele	mentary Settings (TIES) – Teache	r Rep	ort F	orm			
der the pra ans	ect instructional praction monstrate chronic prob box corresponding to actices with the selecte	ces today with focal stu- plem behaviors. Using the the the amount you be d focal student today. T	nation from you about your use of dents in your classroom who he scale (1 – 7) below, please check lieved you used the instructional here are no right or wrong ndividual use of these instructional						
				Not At All		ALittle		Some	A Lot
1.	Did the focal student	demonstrate problem b	ehaviors today?	1		3		5	7
2.	I helped the focal stud	dent develop and/or pra	ectice strategies to identify	1		3		5	7
	emotions and/or hand management).	dle emotions (e.g., frust	ration tolerance, anger						
3.			student when listening to and	1		3		5	7
	interacting with him o	or her.							
4.	THE RESERVE COMMENTS OF THE PERSON NAMED IN		fic response (academic or	1		3		5	7
	behavioral) from the t how your raise your h		t color is this?; Can you show me						
5.			tatements (e.g., Good job! I like	1		3		5	7
	how you are sitting in	your seat) in response	to an appropriate behavior.						
6.			remind the focal student of what	1		3		5	7
			per to sit down when you get to the to sit down on the carpet square).						
7.		ided the focal student to	follow rules and expectations of	1		3		5	7
	the classroom.								
8.			hen interacting with the focal	1		3		5	7
	student (e.g. opportu statement).	nity to respond follower	d by a behavior specific praise						

Thank You!!

SOURCE: Sutherland et al. (2020).¹⁷⁴

OBSTACLE: Implementing data systems across multiple schools can impose notable technology costs.

PANEL'S ADVICE: Although there are numerous benefits of implementing a databased problem-solving approach, the initial and ongoing costs of using data systems may seem formidable. The costs associated with district-wide data systems can range from reasonably modest to significant depending upon factors such as whether districts decide to purchase data systems or buy access to systems and the extent to which districts have already invested in the hardware and databases needed to operate data systems. However, the combination of implementation planning, a phased approach, and resource leveraging¹⁷⁵ can support districts in their pursuit of implementing data systems across schools. District implementation plans provide an important venue for outlining the processes for implementing a problem-solving approach while also articulating the need for additional funding, policy adaptations, and resource reallocations needed to implement data systems. A phased approach including pilot demonstrations of data systems can help demonstrate utility and highlight the need for additional resources to support scalability. Moreover, resource leveraging can be an important concept for districts to embrace. Resource leveraging is the process by which initial investments in personnel, materials, and events to achieve a targeted goal result in outcomes that lead to subsequent investment toward the goal.¹⁷⁶ With its focus on planning and management of initial resources, resource leveraging can improve districts' ability to scale up the use of data systems vital for supporting effective practices to promote prosocial behavior. Please refer to **Recommendation 5** for further details on how districts can implement organizational systems, including data systems, to support the use of prosocial behavior practices.

RECOMMENDATION 5: Implement the Organizational Systems Needed to Support the Initial Adoption and Sustained Use of Effective Practices with High Fidelity.

The implementation of practices for promoting prosocial behavior is influenced by an array of interdependent factors at the educator, school, district, and state levels.¹⁷⁷ Although this guide focuses primarily on whole-class and whole-school efforts, it is important to reiterate that systems and supports at the district or state levels play a pivotal role in the adoption and sustained use of prosocial behavior supports at the school level.¹⁷⁸ Notably, educational research has focused less on the role of district-and state-level organizational systems in promoting prosocial behavior compared to its focus on classroom and school-wide strategies and frameworks. However, appreciation for the role of district- and state-level organizational systems has increased in recent years, and the panel brings attention to the need to focus on the role of district- and state-level organizational systems.

School-level implementation is more likely to be successful when it is supported at the district or state levels, 179 as districts and states can help create a shared vision, language, and experience for implementing practices while also working to improve resource efficiency, implementation efforts, and organizational management across schools. Accordingly, there is a need for equal emphasis on the systems and organizational supports, at the district or state level, that are necessary for accurate and sustained implementation of practices at the school level.¹⁸⁰ Districts and states offer a key leverage point for improving student outcomes and can provide a multiplier effect for scaling effective evidence-based practices. 181 Recommendations 1 and 2 emphasize the importance of establishing multidisciplinary representative leadership teams within schools to provide leadership for the development, implementation, and sustainment of positive behavioral expectations for all students. Districts and states can take a similar approach: establishing multidisciplinary, representative leadership teams to coordinate the adoption and sustained use of effective practices across schools by helping to build capacity and providing a supportive context for schools to implement effective practices. At the district or state level, these leadership teams can lead by engaging diverse stakeholders, working to align and leverage funding and resources, 182 ensuring policy support, and strengthening workforce capacity. In addition, the representative leadership team can

help to influence and increase school-level capacity to implement effective practices by focusing on training, coaching (**Recommendation 3**), and evaluation. These organizational systems and supports can produce broader educational change through increased promotion of evidence-based practices that fit individual schools' needs and cultures, greater investment in the systems and resources necessary for supporting adoption and sustained used of practices, and a comprehensive implementation plan with the associated stages for achieving high implementation fidelity.

Recommendation 5 was informed by two studies of the effectiveness of implementing organizational systems at the district or state levels to support the adoption and sustainment of effective practices with high fidelity. One of the studies meets WWC group design standards without reservations, while the other study meets WWC group design standards with reservations. In the two studies used to support Recommendation 5, implementing the organizational systems for adopting and sustaining prosocial behavior practices was a major component of the tested intervention.

The panel has confidence in the research suggesting that implementing the organizational systems will support the initial adoption and sustained use of effective practices with high fidelity. See Appendix C for detailed descriptions of the intervention features and findings from each study informing this recommendation.

How to Carry Out the Recommendation

This section describes strategies, examples, and tools available for implementing the organizational systems for adopting and sustaining prosocial behavior practices. All figures and mentions of specific coaching strategies in **Recommendation 5** are offered as examples only and should not be read as endorsements of specific products or approaches.

The guidance below is informed by the studies that support the recommendation, as well as the expert panel's expertise and knowledge of resources and strategies available to help implement the recommendation.

FIGURE 5.1: Steps to Implement Recommendation 5

Establish a multidisciplinary, representative district or state leadership team and develop a comprehensive action plan.
 Actively engage stakeholders in efforts to build school-level capacity.
 Align prosocial behavior practices with existing initiatives, resources, and funding.
 Adopt policies that describe the rationale and provide clear support for practices promoting prosocial behavior.
 Strengthen the workforce capacity to implement and sustain prosocial behavior practices.
 Increase district- or state-wide capacity for implementation functions by investing in implementation drivers.

1. Establish a multidisciplinary, representative district or state leadership team and develop a comprehensive action plan.

Districts and states should establish a multidisciplinary, representative leadership team responsible for directing efforts to build capacity at the school level by providing the necessary systems and supports for implementing prosocial behavior practices. The district or state multidisciplinary leadership team should represent a wide range of stakeholders including general and special education teachers; families; community members with a vested interest in student outcomes; and individuals with in-depth knowledge of the training, coaching, and evaluation practices and systems critical for implementing prosocial behavior practices with high fidelity. Early discussions that focus on establishing a multidisciplinary, representative leadership team should employ the questions identified in **Figure 2.2** of **Recommendation 2** to determine whether a new team is necessary, whether an existing leadership team could fulfill these key roles, and whether any additional members should be added to the team. Upon establishing the representative leadership team, team members should designate a coordinator to facilitate the team's efforts. This individual should have the requisite time and availability to fulfill this role, prior experience in using data to

guide problem-solving and decision-making, and the authority to implement decisions in relation to other team members.

The goal of the district or state leadership team will be to develop the organizational systems and supports needed to implement and sustain practices with a focus on engaging stakeholders, aligning resources, adopting supportive policies, building workforce capacity, and increasing implementation capacity. To achieve these goals, the leadership team should have the authority to make key decisions pertaining to budgets, policies, data systems, and implementation. A key initiative for the leadership team will be developing a comprehensive action plan to build and sustain the capacity for implementing prosocial behavior practices across schools over a 3- to 5-year period. As the teams begin developing comprehensive action plans, they may want to utilize established tools such as the District Systems Fidelity Inventory¹⁸⁵ or the State Systems Fidelity Inventory, 186 which provide a structured approach for conducting initial action planning, monitoring progress, and conducting annual evaluations of implementation fidelity and impacts on student outcomes. Once developed, the action plan will serve as a key resource for guiding the team's subsequent efforts. The leadership team should strive to hold meetings monthly to review progress on the action plan and the components described in the following steps. Finally, a key benefit of developing the plan is that the systems and supports articulated in the plan can be efficiently and effectively incorporated into other strategic plans developed by districts and states.

2. Actively engage stakeholders in efforts to build school-level capacity.

Active engagement of stakeholders who have an interest in or are impacted by prosocial behavior practices is necessary to support development of organizational systems and supports needed to implement effective practices with high fidelity. District or state leadership teams should seek to engage students and family members, educators, school boards, and community members in efforts to build school-level capacity. A comprehensive, written engagement plan will ensure that stakeholder engagement processes are effectively deployed, and that the leadership team is regularly communicating data, information, and accomplishments to stakeholders. Members of the district or state leadership teams can help support active stakeholder engagement efforts by visiting implementation schools and communicating progress at various events and activities.

3. Align prosocial behavior practices with existing practices, resources, and funding.

Schools, districts, and states operate in an environment of scarce resources and competing demands. As such, district or state leadership teams should carefully consider the resources that their proposed practices require to achieve the desired outcomes for students. Resource-mapping tools, careful consideration of and alignment with existing practices (i.e., school-level interventions or district- or state-level initiatives), and development of a comprehensive budget plan are critical resources that districts, and states can utilize to implement, sustain, and scale prosocial behavior practices. Resource-mapping tools, such as the one in **Figure 5.2**, can assist district or state leadership teams in systematically assessing the resources available for implementing practices while also identifying resource gaps. This process of graphically mapping resources can assist district or state leadership teams to better understand available resources and to organize these resources into a standardized and accessible format.¹⁸⁷

FIGURE 5.2: School-Level Intervention Mapping Tool

The purpose of this tool is to (a) provide an overall picture of existing social emotional behavioral initiatives available to the larger community, (b) determine the effectiveness, relevance, and fidelity for each, (c) determine funding and resource allocation, and (d) determine areas of redundancy. This process is led by the multidisciplinary representative district or state leadership team.

Name of Initiative	What is the connection to the mission of the multidisciplinary, representative leadership team?	What personnel are involved in the implementation?	What is the expected outcome?	What evidence of outcomes are there so far?	What is the financial commitment and source of funding?	What fidelity measures exist?	What professional development exists (including coaching and performance feedback)?
PBIS	School climate and culture	All staff	Reduction in suspensions, ODRs, restrictive placements	Improved suspension, ODR, and restrictive placements	District Coach FTE, stipends for building coaches, and professional development	Tiered Fidelity Inventory	Quarterly coaching for building coaches; Professional development for new staff; Ongoing professional development and coaching for all staff
Social Emotional Behavioral Skills Curriculum Other tools cont.	School climate and culture through social emotional learning	School counselors and social workers	Improved skills for students in grades K-5	Reduction in ODRs from last school year	Purchasing curriculum plans for each grade level and professional development for integrating into academic content	Self-report of counselor or social worker	None

SOURCE: Adapted from Pohlman et al. (2019).

After completing a resource map, district or state leadership teams can assess how the identified resources align with other practices by carefully considering how resources could be used to sustain implementation of the proposed practice. During this step, district or state leadership teams can use conceptual maps, diagrams, and other tools to clearly describe how the practices and the associated resources align with other interventions and initiatives with similar goals, systems, and practices. This approach will allow district or state leadership teams to identify opportunities for integrated and/or collaborative implementation that can support long-term sustainability.

The development of a district or state budget plan with prioritized funding for supporting organizational systems and capacity-building activities is a critical requirement for supporting schools in implementing, sustaining, and scaling prosocial behavior practices. 189 When developing budget plans, districts and states may find it helpful to consider resource leveraging,190 or the process by which the outcomes from initial resource investments in personnel, materials, and events to achieve a targeted goal result in subsequent investments toward the goal. Articulation of the short, intermediate-, and long-term funding requirements within budget plans will provide critical support for achieving initial implementation of the practices, in addition to communicating the need for additional funding and resource reallocations that may be necessary to sustain the practices and take them to scale. 191 A variety of resources, such as the SEL Financial Sustainability Toolkit, can be used by district or state leadership teams to develop budget plans. These resources include cost calculators to estimate implementation and sustainability costs, a financial sustainability planning tool, and a budget planning tool (see **Figure 5.3**) that can be used to develop budgets and plan funding sources over a 6-year period.

FIGURE 5.3: Social and Emotional Learning Budget Planning Tool

Implementation Data	Y	Year l	Year 2	Year 3	Year 4	Year 5	Year 6
Number of Schools Served							
Number of Teachers Served							
Number of Students Served							
Projected Number of Proso	cial Behavior Specialists						
Estimate Operating Cost	s: Y	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	(Coordinator (salary and benefits)						
Prosocial Behavior Speciali							
Other Positions (salary and							
Administrative Assistant (
Professional development							
	elopment, communications, etc.)						
Program evaluation	. ,,						
Travel							
Evidence Based Program N	aterials & Curriculum						
Supplies/Materials/Equipm							
Other:							
Other:							
Annual Operating Costs		\$0	\$0	\$0	\$0	\$0	\$0
Per School Costs		\$0	\$0	\$0	\$0	\$0	\$0
Per School Costs		\$0	\$0	\$0	\$0	\$0	\$0
Per School Costs		•••		•••			
	7	Year 1			Year 4	Year 5	Year 6
Budget Sources Local District Funds	3			Year 3			Year 6
Budget Sources	Y						Year 6
Budget Sources Local District Funds	3						Year 6
Budget Sources Local District Funds	3						Year 6
Budget Sources Local District Funds Federal Funds:							Year 6
Budget Sources Local District Funds Federal Funds: State Funds:							Year 6
Budget Sources Local District Funds Federal Funds: State Funds: Other Funding (Foundation		Year 1	Year 2	Year 3	Year 4	Year 5	
Budget Sources Local District Funds Federal Funds: State Funds:	Grants, Donations, etc.):				Year 4		Year 6

SOURCE: Adapted from Collaborative for Academic, Social, and Emotional Learning (CASEL, n.d.).

Even after a district or state budget plan is adopted, district or state leadership teams should continue to assess alignment on a regular basis and as other practices are adopted. Conducting periodic formal alignment reviews will assist district or state leadership teams in assessing whether their practices, as implemented, continue to align with other initiatives and interventions. As new practices are proposed and selected, district or state leadership teams should conduct alignment reviews prior to the adoption of the new practices. These reviews will provide an opportunity to examine the alignment of goals, systems, and practices and identify opportunities for further alignment and integration.

4. Adopt policies that describe the rationale and provide clear support for practices promoting prosocial behavior.

District and state policies provide a critical opportunity to convey the need, importance, and benefits of prosocial behavior practices, articulate formal support for the practices, and emphasize the need to implement these practices with high fidelity. A variety of policy documents (e.g., mission statements, instructional approaches, disciplinary guides, and written transition plans) can be used to establish that the social behavior of students is one of the core functions of schools, convey the need for the new practice, and articulate that the outcomes of the practices are a core goal of the district and/or state. District or state leadership teams may want to begin by developing or updating their mission statements to convey the rationale for adopting prosocial behavior practices, describing the long-term outcomes for students, and including an endorsement from district- and/or state-level administrators.¹⁹²

District and state policies, along with the associated procedures outlined in documents such as student handbooks and codes of conduct, can describe and emphasize the use of the practices in instructional approaches and restate the need for consistently implementing these practices with fidelity. District or state leadership teams can also regularly review their disciplinary policies and procedural guides to reflect the transition from reactive or punitive consequences to practices promoting prosocial behavior and then redistribute the updated guides to stakeholders. Finally, district or state leadership teams may want to consider developing a written transition plan detailing the policies and supports to assist students in acclimating to prosocial behavior practices.

5. Strengthen the workforce capacity to implement and sustain prosocial behavior practices.

The success of evidence-based prosocial behavior practices depends on personnel (including superintendents, administrators, coaches, educators, and support staff) having the capacity to implement and sustain prosocial behavior practices; in other words, personnel must have the right knowledge, skills, and experience to use new behavior practices effectively. Accordingly, district or state leadership teams can help strengthen the workforce's capacity by using procedures designed to ensure that existing and future staff have the capacity to implement and sustain practices. Given

district or state leadership teams' role in directing capacity-building efforts for implementing school-level practices, these teams can provide valuable guidance to schools on criteria for hiring, recruiting, and selecting personnel who have the necessary knowledge, skillset, and experience with prosocial behavior practices. District or state leadership teams can also assist with incorporating prosocial behavior practices and associated implementation activities into job descriptions as another opportunity for strengthening workforce capacity. Annual performance evaluations can be another opportunity to assess staff knowledge and skills of prosocial behavior and to identify opportunities for additional training, professional development, and coaching on implementing prosocial behavior practices within their respective positions (see **Recommendation 3**).

6. Increase district- or state-wide capacity for implementation functions by investing in implementation drivers.

The previous recommendations focus on key drivers for implementing prosocial behavior practices at the school level. **Recommendations 1 through 4** illustrate the vital importance of collecting and analyzing fidelity and outcome data and how data allow schools to effectively diagnose problems, determine which practices are most effective, and assess how practices are improving student outcomes.

Recommendation 3 emphasizes the importance of coaching in conjunction with training and other professional development activities for ensuring that school-based implementers have the motivation, knowledge, and skills to implement evidence-based instructional and classroom management practices. Similar to their school-level counterparts, district or state leadership teams can ensure high fidelity and sustainable implementation of prosocial behavior practices by investing in implementation drivers, the key components of capacity and infrastructure that influence classroom-, school-, and district-level change. Training, coaching, and evaluation are three implementation drivers of particular import for bolstering implementation across schools. By investing in these drivers, district or state leadership teams can ensure that educators, staff, and administrators have the capabilities to implement practices as intended.

Training

Investing in training not only ensures that school-level implementers obtain an indepth knowledge of prosocial practices, but training investments also provide a key professional development opportunity for strengthening instructional and classroom management skills that result in effective teaching. To support investment in training, district or state leadership teams can assist with establishing resources and systems for training schools at the local level. These resources and systems include understanding professional development needs, developing a training action plan, supporting efforts to build local training capacity, and adopting effective training activities. Training activities should focus on providing educators, administrators, and staff with the necessary knowledge to successfully implement new practices. Prosocial behavior trainings should accomplish the following: 195

- Provide information on the theory, philosophy, values, and rationales for practices
- Use training processes grounded in adult learning theory to actively engage participants
- Introduce the components of the practice and the associated rationale
- Provide opportunities to practice new skills and receive feedback within a supportive training environment

Coaching

Recommendation 3 discussed in detail how coaching can build on the foundation provided by training activities by offering important opportunities for staff to practice and master key skills while exercising their job duties. District or state leadership teams can guide the development and implementation of <u>coaching service delivery plans</u>¹⁹⁶ that describe the process, skills, frequency, location, associated time periods, and measures for examining coaching effectiveness. Differentiated coaching supports can bolster effective implementation through providing specialized support across personnel types or through addressing specific needs identified by data.

The coaching processes developed by districts and states should encourage schools to use multiple data sources to support school-level practitioners in implementing practices with fidelity; these data sources include direct observations, practitioner perspectives, and fidelity and outcome data. Coaching data and feedback from

coaches can inform further training improvements and identify opportunities to improve organizational systems and supports. Furthermore, updating coaching service delivery plans can support continuous quality improvement efforts.

Data

As discussed in detail under **Recommendation 4**, investing in evaluation capacity and data systems is vital for continuously assessing implementation fidelity and the effectiveness of practices on student outcomes. District or state leadership teams can support districts and states in developing evaluation plans that specify the methods used to evaluate progress and that detail how data may be used to adapt or update action plans as practices are determined to be effective or in need of modification. Evaluation plans should align with the 3- to 5-year comprehensive action plans developed by the district or state leadership team and should articulate a process and schedule for conducting evaluations at the classroom, school, and district or state levels. Evaluations should focus on understanding implementation fidelity and the impacts of prosocial behavior practices on student outcomes.

District and state evaluation plans should also focus on the importance of implementing effective and efficient data collection systems that provide leaders, teams, educators, and specialists with the data needed for effective decision-making. To guide districts and states in their assessment, selection, and subsequent use of data collection systems, district or state leadership teams can identify key requirements. Data collection systems should promote consistent collection and entry of common data about stakeholder perceptions, implementation fidelity, and outcomes disaggregated by subpopulations.¹⁹⁷ Data collection systems with user-friendly analysis and dissemination features can support administrators, specialists, coaches, and teams in identifying classrooms or schools requiring additional training and coaching support and ensuring that all parties have regular access to the data to engage in continuous decision-making and feedback. Finally, aligning evaluation plans with training and coaching plans will ensure that administrators, specialists, coaches, and teams have the training to effectively use the data collection systems to engage in databased decision-making and problem-solving that improves student outcomes. Access to data is insufficient without the organizational structures (e.g., teams) and problemsolving protocols that allow educators to develop locally relevant solutions.

Potential Obstacles and the Panel's Advice

OBSTACLE: Districts and states may implement prosocial behavior practices without establishing the necessary organizational systems and support.

PANEL'S ADVICE: Although districts and states may be eager to begin using prosocial behavior practices to improve student outcomes, it is imperative that they engage in careful planning using the steps described above to ensure that the systems and supports are in place to ensure success. The combination of a representative district or state leadership team and a comprehensive action plan, stakeholder engagement, alignment of opportunities with existing practices and resources, supportive policies, strengthening of workforce capacity, and investment in implementation drivers are necessary and sufficient conditions for ensuring that practices are implemented with fidelity and are rigorously evaluated to determine their impact on student outcomes. In some instances, districts and states may identify an urgent need to address problem behaviors, which may justify implementing practices before establishing organizational systems and supports. In these situations, the panel recommends that districts or states conduct pilot demonstrations to test and refine practices and demonstrate their associated feasibility and effectiveness before introducing these practices in more schools.

OBSTACLE: Districts and states may be reluctant to implement prosocial behavior practices due to concerns about competing demands for resources within existing initiatives and interventions.

PANEL'S ADVICE: The panel recognizes that districts and states may feel that they do not have sufficient resources to implement additional practices. As problems are identified through decision-making and problem-solving processes, and as proposed solutions are identified, district or state leadership teams may need to carefully consider the resource requirements. Established tools such as resource maps, conceptual maps, and diagrams for illustrating how proposed practices align with other practices, as well as cost calculators and financial sustainability planning tools, can assist districts and states in conducting an in-depth analysis of whether additional prosocial behavior practices can be implemented effectively. In many instances, this deeper analysis may illuminate additional resources or opportunities for alignment that had not been considered previously. In instances when the deeper analysis

determines that resources and alignment opportunities are limited, districts and states may want to consider conducting pilot demonstrations, followed by resource leveraging to implement prosocial behavior practices on a wider scale.

OBSTACLE: Changes in district or state leadership may reduce the support and impetus for adopting the organizational systems and supports required to implement and sustain prosocial behavior practices.

PANEL'S ADVICE: Administrative leadership has been identified as a significant factor in the successful implementation of practices, and leadership turnover can have a considerable impact on the initial adoption and sustainment of practices. 198 However, schools and districts can take several approaches to minimize the adverse effects associated with leadership changes. For example, the inclusion of prosocial behavior practices within mission statements, instructional approaches, disciplinary guides, and written transition plans can communicate the need, importance, and benefits of the practices to new administrators. Furthermore, developing a comprehensive action plan that describes the procedures and processes that will be implemented over a 3- to 5-year period can also help mitigate the impacts of leadership changes by ensuring that a sustainable plan of action is in place. Finally, stakeholder engagement efforts led by the district or state representative leadership team can foster new leadership's continued support by providing administrators an opportunity to visit implementing schools, engage with other stakeholders, and communicate progress toward achieving key milestones and goals at various events and activities.

Glossary

A

<u>Administrator</u> refers to any person who is in a position of authority or who manages people, practices, and policies at a school.

D

<u>Does Not Meet What Works Clearinghouse Group Design Standards</u> identifies a group design study with a low level of causal evidence. This is the rating given to studies with causal research designs that were not implemented rigorously enough to conclude with confidence that the intervention caused the observed changes in outcomes.

G

<u>Group design standards</u> are the set of standards used by the What Works Clearinghouse (WWC) to review studies. These standards are used to evaluate the strength of the evidence of the effectiveness of educational interventions. Studies are given a rating of Meets What Works Clearinghouse Group Design Standards without Reservations, Meets What Works Clearinghouse Group Design Standards with Reservations, or Does Not Meet What Works Clearinghouse Group Design Standards.

M

Meets What Works Clearinghouse Group Design Standards With Reservations is the middle possible rating for a group design study reviewed by the WWC. Studies receiving this rating provide a lower degree of confidence that an observed effect was caused by the intervention. Randomized controlled trials that are not as well implemented or have problems with attrition, along with strong quasi-experimental designs, may receive this rating.

Meets What Works Clearinghouse Group Design Standards Without

Reservations is the highest possible rating for a group design study reviewed by the WWC. Studies receiving this rating provide the highest degree of confidence that an observed effect was caused by the intervention. Only well-implemented randomized

controlled trials that do not have problems with attrition may receive this highest rating.

0

<u>Outcome domain</u> is a group of closely-related outcomes. A domain is the organizing construct for a set of related outcomes through which studies claim effectiveness. For example, the WWC alphabetics domain within the Literacy topic includes the following outcomes: phonemic and phonological awareness, letter identification, print awareness, and phonics. In intervention reports and practice guides, the WWC assesses the rigor of evidence on the effectiveness of interventions within each domain identified in the <u>review protocol</u>. The intervention rating, improvement index, and extent of evidence are determined at the domain level.

P

<u>Positive behavior</u> includes observable actions such as self-management, including self-monitoring, self-evaluation, self-delivered consequences, self-recruited support; social interactions; or other behaviors that yield social and/or instructional benefits in a school setting.

<u>Prosocial behavior</u> is closely related to positive behavior, but for the purposes of this review, prosocial behavior refers to observable actions characterized by interacting with others, including peers and school staff, and behaving in ways to benefit other people. Common examples of prosocial behavior include sharing, volunteering, and protecting someone else from bullying. In the context of the classroom and school environment, students are presented with both formal instruction such as collaborative learning activities, and informal opportunities such as interactions with peer groups, relationships with teachers, and play to develop skills that support prosocial and positive behavior. Aspects of prosocial skill development that might be targeted for this review include those related to underlying social competencies such as emotional regulation, perspective-taking, and cognitive and social problem-solving.

S

<u>School climate</u> refers to the environment of the school, or classrooms within a school. The National Center on Safe Supportive Learning Environments (n.d.) defines

the school environment as a school's "facilities, classrooms, school-based health supports, and disciplinary policies and practices." Aspects of improving the school environment include the physical environment, such as reducing overcrowding and messaging positive behavior expectations on posters; the relational environment, such as improving peer-to-peer communication, or reducing bullying behavior; and the instructional environment, such as improving communication practices or approaches between students and staff.

School equity refers to the policies and practices of the school, or classrooms within a school, that promote an equal chance of success for all students. School equity can be understood in terms of: (1) fairness, whereby personal or social circumstances do not prevent students from achieving their academic potential; and (2) inclusion, whereby a basic minimum standard is shared by all students regardless of personal characteristics (OECD, 2012). School and classroom equity deal with matters such as the disproportionality of discipline practice across different racial, ethnic, and special education subgroups. Typical assessments of equity entail assessing the rate of disciplinary practices such as suspensions across two groups of students within a school, or student or staff surveys of their perceptions of equity.

Appendix A: About the Authors

Staff

The panel would like to thank the review coordinators William Rodick and Caroline Meek and the team of What Works Clearinghouse (WWC)-certified reviewers for their contributions to this guide.

Hiren Nisar, PhD. Director of Analytics and Senior Economist at 2M Research
Dr. Nisar served as a Project Director on Contract 91990019F0319 with the Institute of
Education Sciences. He has more than 16 years of experience conducting evaluations
of social and economic programs and policies that aim to improve the economic and
social wellbeing of students, youth, families, and workers. Prior to joining 2M, Dr.
Nisar was a Senior Analyst/PhD Economist at Abt Associates, where his research
involved empirical designs such as random assignment studies, non-experimental
evaluations, and rapid-cycle evaluations to guide policy and decision-making. Dr.
Nisar has been WWC certified since 2014, has served as a reviewer on several WWC
contracts, and contributed to the development of several intervention reports and
practice guides. Outside of the WWC, Dr. Nisar also conducted systematic reviews on
the U.S. Department of Education's Investing in Innovation Fund (i3) grants, the Math
and Science Partnership program, and the Wallace Foundation's effort to gather
systematic evidence on afterschool programs; each of these efforts requires an indepth knowledge of WWC evidence standards.

Dallas Elgin, PhD. Senior Researcher at 2M Research

Dr. Elgin is a WWC-Certified Reviewer who served as a Task Lead on Contract 91990019F0319 with the Institute of Education Sciences. He has more than 12 years of experience in designing and conducting evaluations of government programs that serve children and families. In his work, Dr. Elgin employs experimental, quasi-experimental, and mixed-methods evaluation designs to examine the effectiveness, efficiency, and equity of human services programs. This experience includes serving as Co-Principal Investigator on a multi-site randomized controlled trial evaluation and several quasi-experimental evaluations focused on improving educational and health/mental health outcomes for children and youth involved in the child welfare system. Dr. Elgin's previous experience includes serving as a Senior Researcher at the

Colorado Department of Human Services, where he was the state's senior expert in internal and contracted program evaluation efforts.					

Expert Panel

Catherine Bradshaw, PhD. (Panel Chair) *University Professor; Senior Associate Dean* for Research and Faculty Development of the School of Education and Human Development, University of Virginia

Dr. Bradshaw's research interests focus on the development of aggressive and problem behaviors and school-based prevention. Her expertise includes bullying and school climate; effects of exposure to violence, peer victimization, and environmental stress on children; children with emotional and behavioral disorders and autism; and the design, evaluation, and implementation of evidence-based programs in schools, including Positive Behavioral Interventions and Supports (PBIS) and social-emotional learning (SEL). Dr. Bradshaw works with the Maryland State Department of Education and several other states and school districts to support the development and implementation of programs and policies designed to prevent bullying and school violence and to foster safe and supportive learning environments. She currently serves as the context expert for the WWC Supportive Learning Environment review.

Virginia Dolan, EdD. Retired, Former Coordinator of Behavioral Supports and Interventions, Anne Arundel County Public Schools

Dr. Dolan has 43 years of experience in the field of education and mental health, including experience as a middle school teacher, special education teacher, school psychologist, and supervisor as psychological services. In her current role, she has written many resource materials on child and adolescent development, initiated the district's first Crisis Response Team, as well as initiated and managed district implementation of multi-tiered systems of support (MTSS) and PBIS. Dr. Dolan also serves on the PBIS Maryland State Leadership Team, for which she has served on multiple state and district committees focusing on equity including special education with placement and student suspension, student discipline polices, and best practices for district/school implementation of MTSS. Her leadership has resulted in significant reductions in student suspensions.

Andy Frey, PhD. Professor in the Kent School of Social Work and Family Sciences, University of Louisville

Dr. Frey's research interests include the development and evaluation of interventions for children with challenging behavior (e.g., PBIS), school-based mental health and social work services that implement behavioral interventions, and the application of

motivational interviews in school settings. In addition to experience as a school social worker and behavioral consultant, he has served as a mental health consultant for Jefferson County Public School's early childhood program for the past 19 years. He has received multiple Institute of Education Sciences (IES) development and efficacy grants related to the First Step Next intervention and applications of motivation interviewing with teachers and caregivers, served as an IES panel reviewer, and is the lead author of the National School Social Work Practice Model.

Rob Horner, PhD. Emeritus Professor of Special Education, University of Oregon; Senior Advisor, National Technical Assistance Center on PBIS

Dr. Horner's research focuses on applied behavior analysis, PBIS, multitiered instructional systems, and equity in education. He is also the co-director of the OSEP Technical Assistance Center on PBIS and the OSEP Technical Assistance Center on State Implementation and Scaling of Evidence-based Practices. In these roles, he works directly with schools and school administrators in developing systems for embedding school-wide PBIS. He served as a content expert on the WWC review for Children Identified with or At Risk for an Emotional Disturbance Evidence Review Protocol. Dr. Horner has received multiple IES grants and helped develop IES standards for evaluating the causal validity of single-case research designs.

Julie Owens, PhD. Professor of Psychology; Co-Director of the Center for Intervention Research in Schools, Ohio University

Dr. Owens has over 20 years of experience in developing and evaluating universal and targeted classroom interventions to facilitate academic, social, emotional, and behavioral functioning of elementary school students. Her research specifically focuses on assessing the effectiveness and sustainability of evidence-based interventions, as well as identifying factors that help teachers effectively implement these interventions well. She also has expertise in consultation and coaching of teachers in effective strategies related classroom management, positive student-teacher relationships, and positive peer relationships. In addition to her position at Ohio University, Dr. Owens is also a licensed clinical psychologist. She has received Goal 1, 2, and 3 IES research grants and serves as an IES panel reviewer.

Kelly Perales, LCSW. Co-*Director of the Midwest PBIS Network*Ms. Perales is the Co-Director of the Midwest PBIS Network and an Implementer Partner with the Center on PBIS. As such, she provides professional development and

technical assistance for state and local leaders in the implementation and scale up of PBIS, the evidence-based MTSS for social-emotional-behavioral health and wellness. In addition, Ms. Perales has led local, regional and state level implementers in the Interconnected Systems Framework, focusing on the integration of the mental health and education systems. Currently, she is the Principal Investigator for an Office of Special Education and Rehabilitative Services Model Demonstration Grant - Project EPIC (Enhancing Family-School-Community Partnerships through an Interconnected Systems Framework Collaboration) and the lead trainer for a National Institute on Minority Health and Health Disparities Violence Prevention Grant - Project RISE (Reducing Inequities in School Environments).

Kevin Sutherland, PhD. Professor in the Department of Counseling and Special Education, Virginia Commonwealth University (VCU)

Dr. Sutherland's research primarily focuses on enhancing the use and fidelity of the implementation of evidence-based programs aiming to reduce problem behavior in school and community environments. He has conducted both single case and large, multisite randomized control trials to examine the effects of delivery of evidence-based practices on teacher and student outcomes. With experience as a teacher of students with emotional and behavioral disorders, he also has expertise in teacher-student interactions and teacher-student relationships. He is also currently on the research faculty for VCU's Clark-Hill Institute for Positive Youth Development and is on the Board of Directors for the Peter Paul Development Center. Dr. Sutherland has received IES research grants and is an IES panel reviewer.

Disclosure of Potential Conflicts of Interest

The panel was composed of individuals who are nationally recognized experts on the topics about which they are making recommendations. The experts are often involved professionally in a variety of other matters that might relate to their work as a panelist. Panel members were asked to disclose these professional activities and institute deliberative processes that encourage critical examination of their views as they relate to the content of the guide. The potential influence of the panel members' professional activities is further muted by the requirement that they ground their recommendations in evidence that is documented in the guide.

The professional activities reported by each panel member that appear to be most closely associated with the panel recommendations are noted below.

Catherine Bradshaw, PhD (Panel Chair). *University Professor and Senior Associate Dean for Research and Faculty Development of the School of Education and Human Development at University of Virginia.*

Virginia Dolan, EdD. Retired, Formerly Coordinator of Behavioral Supports and Interventions, Anne Arundel County Public Schools

Andy Frey, PhD. Professor in the Kent School of Social Work, University of Louisville

Rob Horner, PhD. Emeritus Professor of Special Education, University of Oregon; Senior Advisor, National Technical Assistance Center on PBIS

Julie Owens, PhD. Professor of Psychology; Co-Director of the Center for Intervention Research in Schools, Ohio University

Kelly Perales, LCSW. Co-Director of the Midwest PBIS Network

Kevin Sutherland, PhD. Professor in the Department of Counseling and Special Education, Virginia Commonwealth University

Appendix B: Methods and Processes for Developing This Guide

Phase 1: Selecting the Topic and the Panel; Establishing a Review Protocol

EXPERT PANEL. 2M Research, working under contract to the Institute of Education Sciences, established a seven-member expert panel to advise on development of this guide. The panel consisted of researchers at the forefront of prosocial behavior research and practitioners with experience implementing prosocial behavior interventions.

SYSTEMATIC REVIEW PROTOCOL. 2M Research worked with the expert panel to develop the systematic <u>review protocol</u>, which states the guide's purpose and scope. The protocol guided the literature search and review effort. The five research questions were:

- Which whole-class or whole-school (Tier 1) practices are effective at supporting positive behavior among students in elementary school?
- Which whole-class or whole-school (Tier 1) practices are effective at supporting change in educators' instructional and disciplinary practices?
- Which whole-class or whole-school (Tier 1) practices are effective at improving the school or classroom environment, including measures of school climate and equity?
- What supports are needed to help educators implement these practices with fidelity to promote positive behavior?
- Are some practices especially effective for students who are identified with disabilities or who are at risk of identification for special education services while learning in a Tier 1 context?

The timeframe for the literature search was approximately 10 years, from January 2008 to December 2019. The eligible sample included participants in a prosocial behavior intervention within elementary grade classrooms or schools in the United States. These participants had to have been students in grades K-6 or ages 5-11 when the intervention was implemented. Eligible study designs included randomized controlled trials and quasi-experimental design studies. Studies had to include a prosocial behavior intervention in elementary schools with a primary focus on prosocial behavior within whole classrooms or schools. Only outcome domains that

relate to prosocial behavior were eligible for inclusion. The 10 domains were as follows:

- 1. Student Engagement in School
- 2. Compliant Student Behavior
- 3. Student Social Emotional Functioning
- 4. Primary School Academic Achievement
- 5. General Literacy Achievement
- 6. General Mathematics Achievement
- 7. Educator Discipline Practice
- 8. Educator Instructional Practice
- 9. Classroom and School Climate
- 10. Classroom and School Equity

Phase 2: Literature Search and Review

A targeted yet comprehensive search of electronic databases was conducted by 2M Research staff using keywords focused on eligible prosocial behavior components, populations, settings, study designs, and outcomes. The search terms are delineated in the systematic review protocol. Four electronic databases (American Psychological Association's PsycINFO, EBSCOHost Education Resources Information Center [ERIC], MEDLINE PubMed, and Web of Science: Core Collection) were searched between August and November 2019. Panel members also recommended studies that could potentially contribute to the guide.

A total of more than 10,875 publications were identified and screened using a multistage screening process to determine whether they focused on school-wide prosocial behavior interventions and met the eligibility criteria detailed in the protocol and described above. This screening process produced 42 eligible studies that were reviewed using What Works Clearinghouse (WWC) 4.0 group design standards. Studies employing qualitative, descriptive, or single-case designs as well as branded interventions were not examined for eligibility. For a study to meet WWC standards, at least one contrast must meet WWC standards with or without reservations. See **Figure B.1**. for the number of records that went through the screening and eligibility process and the number of studies that were reviewed with the corresponding WWC evidence ratings.

Records identified Identification (n = 10,875)Records screened in for Records excluded Screening topic relevance (n = 114)(n = 10,761)Records eligible for review Records ineligible for **Eligibility** (n = 42)review (n = 72)Studies that meet WWC Studies that do not meet **Evidence Rating** Standards without WWC Standards (n = 32)reservations (n = 3)Studies that meet WWC Studies that meet WWC Standards with reservations Standards, but are not relevant (n = 4)to the recommendations (n = 3)

FIGURE B.1. Studies Identified, Screened, and Reviewed for This Guide

Phase 3: Generating the Recommendations

2M Research conducted a detailed examination of the studies that meet WWC standards to identify practices that played a role in each intervention. The panel identified five recommendations that were grounded in evidence provided by the seven studies that meet WWC standards. Three of the studies that meet WWC standards were not used for generating the recommendations. ¹⁹⁹ The panel then suggested ideas for carrying out the recommendations based on research.

Phase 4: Drafting the Guide

2M Research worked with the panel to further expand and clarify each recommendation and how to implement each recommendation. The team then used an iterative process to draft the recommendations, soliciting feedback from the panel and revising as needed at each stage. 2M Research prepared the technical appendices.

Appendix C: Studies Informing the Practice Recommendations

Conducting Reviews of Eligible Studies

What Works Clearinghouse (WWC)-certified staff reviewed 10 studies to assess the quality of evidence supporting whole-school or whole-class prosocial behavior interventions, using WWC 4.0 group design standards. Seven out of the 10 studies that meet WWC standards inform the recommendations. These studies are bolded in the Notes and in the Reference sections.

Determining Relevance to Recommendations

Each of the seven studies inform more than one recommendation, as the interventions in these studies include more than one practice (or component) for improving student and educator outcomes. For example, one multi-component intervention might include implementing school-wide procedures for positive behavioral expectations (Recommendation 1), implementing school-wide procedures to ensure consequences for problem behavior (Recommendation 2), using longitudinal data (Recommendation 4), and implementing the organizational systems to support adopting and sustaining practices with fidelity (Recommendation 5); therefore, an intervention can inform more than one recommendation. 2M Research determined which components were prominent in each intervention. Major intervention components in each study that meet WWC standards were then assigned to the evidence base for the relevant recommendation. Table C.1 presents the mapping between each study and the five recommendations.

TABLE C.1: Mapping Between Studies and Recommendations

	Recommendation				
Study	Positive behavioral expectations	Consequences for problem behavior	Teacher coaching	Longitudinal data	Organizational systems
Berg (2018)	•	•	-		<u> </u>
Bradshaw et al. (2010)	•	•		•	•
Bradshaw et al. (2018)			•	•	
Fabiano et al. (2018)			•	•	
Horner et al. (2018)	•	•	•	•	
Ottmar et al. (2013)	•	•			
Pas et al. (2019)	•	•		•	•

Determining Relevant Outcomes

To simplify and focus the synthesis of evidence, 2M Research worked with the panel to identify which outcome domains were relevant for each recommendation. The relevant domains for each recommendation are listed in Table C.2.

The panel drew a notable distinction between proximal and distal outcomes, and, ultimately, determined how each type of outcome informed the recommendations. Outcomes in the student behavior, educator disciplinary and instructional practices, and school environment domains were designated as proximal outcomes on the basis that behavioral interventions would be most likely to directly affect these outcomes over a shorter time period, as is the case in the studies reviewed for this guide. In contrast, academic achievement outcomes (including outcomes in domains of primary school academic achievement, general literacy achievement, and general mathematics achievement) were characterized as distal outcomes on the basis that behavioral interventions would be less likely to directly affect these outcomes in the short term but may affect these outcomes over time. Accordingly, the expert panel focused on proximal outcomes for student behavior, educator disciplinary and instructional practices, and the school environment to develop the evidence ratings associated with each recommendation. In contrast, the panel designated academic

achievement outcomes (i.e., primary school academic achievement, general literacy achievement, and general mathematics achievement outcomes) as a secondary focus.

Recommendations 1, 2, and 5 align with student outcomes, and Recommendations 3 and 4 align with student and educator outcomes. No studies that meet WWC standards included findings in the school environment domain. The panel and staff considered the findings in the predetermined relevant domains to inform each recommendation. Only findings in relevant domains are presented in this appendix.

The two proximal student outcome domains (student compliance behavior and student social emotional functioning) are measured at the cluster level, given the focus on whole-school or whole-class interventions. The two educator proximal outcome domains were measured and analyzed at the individual level.

In addition, all the distal outcomes (student primary academic achievement, general mathematics achievement, and general literacy achievement) were measured and analyzed at the cluster level.

TABLE C.2: Relevant Domains for Each Recommendation

Recommendation 1, 2, and 5	Recommendation 3	Recommendation 4
Student outcome domain	Student outcome domain	Student outcome domain
1. Compliant student behavior	1. Compliant student behavior	1. Compliant student behavior
2. Student social emotional	2. General literacy achievement	2. Student social emotional
functioning	3. General mathematics	functioning
3. Primary school academic	achievement	3. Primary school academic
achievement		achievement
4. General literacy achievement	Educator outcome domain	4. General literacy achievement
5. General mathematics	1. Educator discipline practice	5. General mathematics
achievement	2. Educator instructional	achievement
	practice	Educator outcome domain
		1. Educator discipline practice
		2. Educator instructional
		practice

Note: The panel designated academic achievement outcome domains italicized in the table (i.e., primary school academic achievement, general literacy achievement, and general mathematics achievement) as distal outcome domains on the basis that behavioral interventions would be less likely to directly affect these outcomes in the short term but may affect these outcomes over time. The non-italicized domains are

the proximal outcome domains and the main focus, while the italicized domains are distal outcome domains and the secondary focus of this guide.

Recommendation 1: Implement School-Wide Procedures for Defining, Teaching, and Acknowledging a Small Set (e.g. 3-5) of Positive Behavioral Expectations.

Recommendation 1 was informed by five studies of interventions with school-wide procedures and practices for positive behavioral expectations. Two of the studies meet WWC group design standards without reservations,²⁰⁰ and the other three studies meet WWC group design standards with reservations.²⁰¹ Study designs are noted in Table C.3 and subsequent tables as randomized controlled trials (RCTs) or quasi-experimental designs (QEDs).

Across the five studies,²⁰² there were findings in two proximal outcome domains (Table C.3). Three distal outcome domains were also relevant for this recommendation, but this recommendation focused on proximal outcome domains only.

Evidence from all five studies provides a direct test of the recommendation, as positive behavioral expectations are a major component of the interventions.

- In Bradshaw et al. (2010), the intervention consisted of a seven-step procedure for implementing school-wide positive behavioral intervention supports (SWPBIS).
- In Pas et al. (2019), the intervention consisted of providing schools with SWBPIS training and implementation support, which consisted of initial and booster trainings, a 3-year commitment to implement SWPBIS within schools, and a four- to six-person SWBPIS team.
- In Horner et al. (2018), the intervention consisted of implementing a positive behavioral intervention and problem-solving team that was responsible for precisely defining problems, setting goals related to the problem, selecting contextually appropriate solutions, and developing an action plan.
- In Berg (2018), the School-wide (SW) Attendance and Truancy Intervention (ATI-UP) intervention consisted of five components focused on defining, publicizing, and reinforcing attendance expectations.

•	In Ottmar et al. (2013), the Responsive Classroom (RC) intervention consisted of implementing nine key practices with positive behavioral expectations over a 2-year period.

TABLE C.3: Studies Informing Recommendation 1: Implement school-wide procedures for defining, teaching, and acknowledging a small set (e.g., 3-5) of positive behavioral expectations

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
Berg (2018)	27 public schools	Elementary schools across 15	School-wide (SW) Attendance and Truancy	Business-as-usual:	Proximal Outcome
RCT	Student	districts in Eugene, Oregon.	Intervention (ATI-UP): Developed based on critical features of the	Comparison group members continued business-as-usual	Domains
KG1	characteristics:		Multi-Tier System of Supports (MTSS)	practices that addressed	Compliant student
Meets WWC	•63% White (Non-		model to increase average daily attendance	absenteeism. All schools were	behavior:
group design	Hispanic)		and reduce the number of students who	already implementing SW-PBIS	g = 0.096
standards with	•3% American		are chronically absent by focusing on Tier 1	with varying levels of fidelity.	
reservations	Indian		prevention strategies. The intervention had		
	•2.5% Asian		five components:	Some comparison schools had	
	•1.5% Black		(1) schools publicize the importance of	existing practices that they	
	•4.5% two or more		attendance;	continued to implement. For	
	races		(2) schools establish attendance goals and	example, one of the control	
	•25% Hispanic		acknowledge improvements;	schools had an attendance	
	•49% female		(3) staff provide an informal and formal	coordinator who connected	
	•60% eligible for free or reduced		focus on attendance; (4) schools communicate with parents and	with parents at early signs of attendance problems.	
	lunch		provide ways to engage with the school;	attendance problems.	
	•16.5% English-		and		
	language learners		(5) schools use motivation systems to		
	•13.5% received		generate enthusiasm.		
	special education				
	services				
Bradshaw et	37 public schools	Elementary schools across 5	SW-PBIS:	Business-as-usual:	Proximal Outcome
al. (2010)	(consisting of	suburban and rural school	The intervention was implemented by	Comparison group members	Domains
	12,344 students)	districts in Maryland.	following seven steps:	continued business-as-usual	
RCT	Q. 1		(1) Forming a SW-PBIS team that included	practices with assurances that	Compliant student
M HTW	Student		five to six teachers and an administrator.	they would not conduct any SW-	behavior:
Meets WWC	characteristics: •Enrolled in K-2		The team attended a 2-day summer training followed by an annual 2-day	PBIS training for 4 years.	g = 0.12
group design standards	•52.9% male		booster training;		Student social
sianaaras without	•45.1% African		(2) Receiving onsite support and technical		emotional
reservations	American		assistance from a trained behavior support		functioning:
i esci vations	•46.1% White		coach on at least a monthly basis;		g = 0.07

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
Horner et al.	•49% received free or reduced-price meals •12.9% received special education services	Elementary schools in North	(3) Establishing 3 to 5 expectations for positive student behavior, which were posted around the school and were known to staff and students; (4) Developing lesson plans defining behavioral expectations for teaching students at the beginning of the school year and at least once a month thereafter; (5) Developing, consistently using, and reinforcing a school-wide system to reward students who exhibit the expected positive behavior; (6) Agreeing on what constitutes a behavioral violation, and students receiving consistent consequences for disciplinary infractions; and (7) Developing a formal system to collect, analyze, and use disciplinary data for databased decision-making. Team-Initiated Problem Solving (TIPS):	Waitlisted control group:	Distal Outcome Domains General mathematics achievement: $g = 0.03$ General literacy achievement: $g = 0.05$ Primary school academic achievement: $g = 0.00$
Horner et al. (2018) RCT Meets WWC group design standards without reservations	38 elementary schools Student characteristics: •47.3% White •23.2% African American •22.8% Hispanic •0.7% American Indian •1.7% Asian •4.3% multiple races •58.6% eligible for free or reduced-price lunch	Elementary schools in North Carolina and Oregon that implemented PBIS for at least a year with a team that met at least once a month, and that had used the School-Wide Information System (SWIS) in the previous 6 months.	Team-Initiated Problem Solving (TIPS): TIPS involves precisely defining problems, setting goals related to the problem, selecting contextually appropriate solutions, developing an action plan, identifying ways to gather fidelity and outcome data, analyzing those data, and using what is learned from the data analysis to refine the action plans. PBIS teams in treatment schools received training on the TIPS model from district PBIS coaches.	Waitlisted control group: Members of the comparison group used business-as-usual practices.	Proximal Outcome Domains Compliant student behavior: g = 0.56 Distal Outcome Domains General mathematics achievement: g = 0.01 General literacy achievement: g = 0.05

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
Ottmar et al. (2013) QED Meets WWC group design standards with reservations	24 schools (consisting of 88 teachers and 2,904 students) Student characteristics: •41% White •4% African American •2% Asian •4% Hispanic •5% Other •28% English- language learners	A "mid-Atlantic" public school district.	Responsive Classroom (RC): RC consists of 9 key practices implemented over 2 years. The first year consists of Morning Meeting, Rule Creation, Interactive Modeling, Positive Teacher Language, and Logical Consequences. The second year consists of Guided Discovery, Academic Choice, Classroom Organization, and Collaborative Problem Solving.	Waitlisted control group: Members of the comparison group were waitlisted and continued with business-as- usual practices.	Distal Outcome Domains General mathematics achievement: $g = -0.058$ General literacy achievement: $g = -0.027$
Pas et al. (2019) QED Meets WWC group design standards with reservations	859 public elementary, middle, and high schools	Schools selected from across Maryland's 24 public school districts.	SW-PBIS: Schools received SW-PBIS training and implementation support. Initial and booster trainings were 2 days long and required schools to make a 3-year commitment to implementing SW-PBIS and identifying a four- to six-person team to attend training. These teams provided the schools with ongoing supports.	Business-as-usual: Members of the comparison group did not receive SW-PBIS training and implementation.	Proximal Outcome Domains Compliant student behavior: $g = 0.07$ Distal Outcome Domains General mathematics achievement: $g = 0.23$ General literacy achievement: $g = 0.01$

Notes: Each row in this table represents a study, as defined by the WWC. QED = quasi-experimental design; RCT = randomized controlled trial.

- ^a Sample size represents the maximum number of participants in the study. In some studies, the number of participants varied across the outcome measures.
- ^b Effect sizes presented are from the outcome closest to the end of the intervention. For brevity, only the domain average effect size and statistical significance are reported in this table.
- * = Statistically significant at the .05 level.

Recommendation 2: Implement School-Wide Procedures to Ensure that Consequences for Problem Behavior (a) Prevent Escalation, (b) Interrupt and/or Redirect Problem Behavior to Expected Behavior, and (c) Minimize Inadvertently Rewarding Problem Behavior.

Recommendation 2 was informed by five studies of interventions with procedures and practices to reduce problem behaviors. Two of the studies meet WWC group design standards without reservations,²⁰³ and the other three studies meet WWC group design standards with reservations.²⁰⁴

Evidence from all five studies provides a direct test of the recommendation, as positive behavioral expectations are a major component of the interventions.

- In Bradshaw et al. (2010), the intervention consisted of a seven-step procedure for implementing school-wide positive behavioral intervention supports (SWPBIS).
- In Pas et al. (2019), the intervention consisted of providing schools with SWBPIS training and implementation support, which consisted of initial and booster trainings, a 3-year commitment to implement SWPBIS within schools, and a four- to six-person SWBPIS team.
- In Horner et al. (2018), the intervention consisted of implementing a positive behavioral intervention and problem-solving team that was responsible for precisely defining problems, setting goals related to the problem, selecting contextually appropriate solutions, and developing an action plan.
- In Berg (2018), the School-wide (SW) Attendance and Truancy Intervention (ATI-UP) intervention consisted of five components focused on defining, publicizing, and reinforcing attendance expectations.
- In Ottmar et al. (2013), the Responsive Classroom (RC) intervention consisted of implementing nine key practices with positive behavioral expectations over a 2-year period.

TABLE C.4: Studies Informing Recommendation 2: Implement school-wide procedures to ensure that consequences for problem behavior (a) prevent escalation, (b) interrupt and/or redirect problem behavior to expected behavior, and (c) minimize inadvertently rewarding problem behavior

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
Berg (2018)	27 public schools	Elementary schools across 15	School-wide (SW) Attendance and Truancy	Business-as-usual:	Proximal Outcome
		districts in Eugene, Oregon.	<u>Intervention (ATI-UP</u>):	Comparison group members	Domains
RCT	Student		Developed based on critical features of the	continued business-as-usual	
	characteristics:		Multi-Tier System of Supports (MTSS)	practices that addressed	Compliant student
Meets WWC	•63% White (Non-		model to increase average daily attendance	absenteeism. All schools were	behavior:
group design	Hispanic)		and reduce the number of students who	already implementing SW-PBIS	g = 0.096
standards with	•3% American		are chronically absent by focusing on Tier 1	with varying levels of fidelity.	
reservations	Indian		prevention strategies, the intervention had		
	•2.5% Asian		five components:	Some comparison schools had	
	•1.5% Black		(1) schools publicize the importance of	existing practices that they	
	•4.5% two or more		attendance;	continued to implement. For	
	races		(2) schools establish attendance goals and	example, one of the control	
	•25% Hispanic		acknowledge improvements;	schools had an attendance	
	•49% female		(3) staff provide an informal and formal	coordinator who connected	
	•60% eligible for		focus on attendance;	with parents at early signs of	
	free or reduced		(4) schools communicate with parents and	attendance problems.	
	lunch		provide ways to engage with the school;		
	•16.5% English-		and		
	language learners		(5) schools use motivation systems to		
	•13.5% received		generate enthusiasm.		
	special education services				
Bradshaw et	37 public schools	Elementary schools across 5	SW-PBIS:	Business-as-usual:	Proximal Outcome
al. (2010)	(consisting of	suburban and rural school	The intervention was implemented by	Comparison group members	Domains
ai. (2010)	12,344 students)	districts in Maryland.	following seven steps:	continued business-as-usual	Domans
RCT	12,544 students)	districts in maryiand.	(1) Forming a SW-PBIS team that included	practices with assurances that	Compliant student
KO1	Student		five to six teachers and an administrator.	they would not conduct any SW-	behavior:
Meets WWC	characteristics:		The team attended a 2-day summer	PBIS training for 4 years.	g = 0.12
group design	•Enrolled in K-2		training followed by an annual 2-day	cramming for 1 years.	0 0.12
standards	•52.9% male		booster training;		Student social
without	•45.1% African		, , , , , , , , , , , , , , , , , , ,		emotional
reservations	American				functioning:

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
	•46.1% White •49% received free or reduced-price meals •12.9% received special education services		(2) Receiving onsite support and technical assistance from a trained behavior support coach on at least a monthly basis; (3) Establishing 3 to 5 expectations for positive student behavior, which were posted around the school and were known to staff and students; (4) Developing lesson plans defining behavioral expectations for teaching students at the beginning of the school year and at least once a month thereafter; (5) Developing, consistently using, and reinforcing a school-wide system to reward students who exhibit the expected positive behavior; (6) Agreeing on what constitutes a behavioral violation, and students receiving consistent consequences for disciplinary infractions; and (7) Developing a formal system to collect, analyze, and use disciplinary data for databased decision-making.		g = 0.07 Distal Outcome Domains General mathematics achievement: g = 0.03 General literacy achievement: g = 0.05 Primary school academic achievement: g = 0.00
Horner et al. (2018) RCT Meets WWC group design standards without reservations	38 elementary schools Student characteristics: •47.3% White •23.2% African American •22.8% Hispanic •0.7% American Indian •1.7% Asian •4.3% multiple races	Elementary schools in North Carolina and Oregon that implemented PBIS for at least a year with a team that met at least once a month, and that had used the School-Wide Information System (SWIS) in the previous 6 months.	Team-Initiated Problem Solving (TIPS): TIPS involves precisely defining problems, setting goals related to the problem, selecting contextually appropriate solutions, developing an action plan, identifying ways to gather fidelity and outcome data, analyzing those data, and using what is learned from the data analysis to refine the action plans. PBIS teams in treatment schools received training on the TIPS model from district PBIS coaches.	Waitlisted control group: Members of the comparison group used business-as-usual practices but received the TIPS training prior to the last data collection period.	Proximal Outcome Domains Compliant student behavior: $g = 0.56$ Distal Outcome Domains General mathematics achievement: $g = 0.01$

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
Ottmar et al. (2013) QED Meets WWC group design standards with reservations	•58.6% eligible for free or reduced-price lunch 24 schools (consisting of 88 teachers and 2,904 students) Student characteristics: •41% White •4% African American •2% Asian •4% Hispanic •5% Other •28% English-	A "mid-Atlantic" public school district.	Responsive Classroom (RC): RC consists of 9 key practices implemented over 2 years. The first year consists of Morning Meeting, Rule Creation, Interactive Modeling, Positive Teacher Language, and Logical Consequences. The second year consists of Guided Discovery, Academic Choice, Classroom Organization, and Collaborative Problem Solving.	Waitlisted control group: Members of the comparison group were waitlisted and continued with business-as- usual practices.	General literacy achievement: $g = 0.05$ Distal Outcome Domains General mathematics achievement: $g = -0.058$ General literacy achievement: $g = -0.027$
Pas et al. (2019) QED Meets WWC group design standards with reservations	language learners 859 public elementary, middle, and high schools	Schools selected from across Maryland's 24 public school districts.	SW-PBIS: Schools received SW-PBIS training and implementation support. Training was provided by the federal Office for Special Education Programs. Initial and booster trainings were 2 days long and required schools to make a 3-year commitment to implementing SW-PBIS and identifying a four- to six-person team to attend training. These teams provided the schools with ongoing supports.	Business-as-usual: Members of the comparison group did not receive SW-PBIS training and implementation.	Proximal Outcome Domains Compliant student behavior: $g = 0.07$ Distal Outcome Domains General mathematics achievement: $g = 0.23$ General literacy achievement: $g = 0.01$

Notes: Each row in this table represents a study, as defined by the WWC. QED = quasi-experimental design; RCT = randomized controlled trial.

^a Sample size represents the maximum number of participants in the study. In some studies, the number of participants varied across the

^a Sample size represents the maximum number of participants in the study. In some studies, the number of participants varied across the outcome measures.

^b Effect sizes presented are from the outcome closest to the end of the intervention. For brevity, only the domain average effect size and statistical significance are reported in this table.

* = Statistically significant at the .05 level.

Recommendation 3: Use Coaching to Support Implementation of Evidence-Based Instructional and Classroom Management Strategies.

Recommendation 3 was informed by three studies of interventions with coaching components. Two of the studies meet WWC group design standards without reservations,²⁰⁵ and the other study meets WWC group design standards with reservations.²⁰⁶

Evidence from all three studies provides a direct test of the recommendation, as coaching is a major component of the interventions.

- In Horner et al. (2018), the intervention consisted of PBIS teams receiving training on Team-Initiated Problem Solving (TIPS), and then implementing the TIPS model. The model's core components consist of precisely defining problems, setting goals related to problems, selecting contextually appropriate solutions, developing an action plan, identifying ways to gather fidelity and outcome data, analyzing those data, and using what is learned from the data analysis to refine action plans.
- In Bradshaw et al. (2018), the intervention consisted of implementing the Double Check, which consists of three core components: (1) augmentations to the Tier 1 elements of SWPBIS; (2) a set of five 60-minute professional development trainings addressing five core domains of culturally responsive practices; and (3) individual classroom coaching using an adapted version of the Classroom Check-Up (CCU), which utilized structured problem-solving to facilitate changes in teacher practices.
- In Fabiano et al. (2018), the intervention consisted of teacher coaching supported by formative assessment using the Classroom Strategies Assessment System (CSAS), a multidimensional classroom observation instrument for the assessment and intervention of teachers' classroom practices.

TABLE C.5: Studies Informing Recommendation 3: Use coaching to support implementation of evidence-based instructional and classroom management strategies

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC-Calculated Effect Size ^b
Bradshaw et al. (2018) RCT Meets WWC group design standards without reservations	158 teachers (104 middle school and 54 elementary schools) Teacher characteristics: •85.4% female •75.3% White •12.0% Black •8.9% other race •33.5% early career (20 to 30 years old) •65.8% middle school teachers	6 elementary schools and 6 middle schools in a single district in Maryland.	Double Check Coaching: The intervention included 3 core components: (1) augmentations to the Tier 1 elements of SWPBIS; (2) a set of five 60-minute professional development trainings addressing five core domains of culturally responsive practices; and (3) individual classroom coaching using an adapted version of the Classroom Check-Up (CCU), which utilized structured problemsolving to facilitate changes in teacher practices.	Business-as-usual: Members of the control group implemented the following components: (1) augmentations to the Tier 1 elements of SW-PBIS; and 2) a set of five 60-minute professional development trainings addressing five core domains of culturally responsive practices.	Proximal Outcome Domains Compliant student behavior: $g = 0.30$ Educator instructional practice: $g = 0.24$ Educator discipline practice: $g = 0.45^*$
Fabiano et al. (2018) RCT Meets WWC group design standards with reservations	89 elementary general education teachers Teacher characteristics: •94.4% female •95% White •3% Asian •1.5% Black •1% Hispanic/Latino	Elementary general education classroom teachers across K-5 grades in New Jersey and New York.	Teacher coaching supported by formative assessment: Teachers received four 30-minute weekly sessions of coaching, in which coaches provided support to teachers in discussing practice needs, reviewing classroom observational data, setting goals to use strategies, implementing plans, and monitoring progress. Coaching sessions were combined with the Classroom Strategies Assessment System (CSAS), a multidimensional classroom observation instrument for the assessment of classroom practices.	Waitlisted control group: Members of the comparison group used business-as-usual practices.	Proximal Outcome Domains Educator instructional practice: $g = 0.23$ Educator discipline practice: $g = 0.54^*$
Horner et al. (2018)	38 elementary schools	Elementary schools in North Carolina and Oregon	Team-Initiated Problem Solving (TIPS):	Waitlisted control group:	Proximal Outcome Domains

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC-Calculated Effect Size ^b
RCT	Student	that implemented PBIS for at least a year with a team	TIPS involves precisely defining problems, setting goals related to the problem,	Members of the comparison group used business-as-usual	Compliant student
KC1	characteristics:	that met at least once a	selecting contextually appropriate	practices.	behavior:
Meets WWC	•47.3% White	month, and that had used	solutions, developing an action plan,	practices.	g = 0.56
group design	•23.2% African	the School-Wide	identifying ways to gather fidelity and		8 0.00
standards	American	Information System (SWIS)	outcome data, analyzing those data, and		Distal Outcome
without	•22.8% Hispanic	in the previous 6 months.	using what is learned from the data analysis		Domains
reservations	•0.7% American		to refine the action plans. PBIS teams in		
	Indian		treatment schools received training on the		General mathematics
	•1.7% Asian		TIPS model from district PBIS coaches.		achievement:
	•4.3% multiple				g = 0.01
	races				
	•58.6% eligible for				General literacy
	free or reduced-				achievement:
	price lunch				g = 0.05

Notes: Each row in this table represents a study, as defined by the WWC. QED = quasi-experimental design; RCT = randomized controlled trial. ^a Sample size represents the maximum number of participants in the study. In some studies, the number of participants varied across the outcome measures.

^b Effect sizes presented are from the outcome closest to the end of the intervention. For brevity, only the domain average effect size and statistical significance are reported in this table.

^{* =} Statistically significant at the .05 level.

Recommendation 4: Collect, Summarize, and Use Fidelity and Student Outcome Data at All Levels for Iterative Decision-Making and Problem-Solving by Stakeholders.

Recommendation 4 was informed by five studies of interventions with components related to collecting, summarizing, and using fidelity and student outcome data. Three of the studies meet WWC group design standards without reservations, ²⁰⁷ and the other two studies meet WWC group design standards with reservations. ²⁰⁸

Evidence from all five studies provides a direct test of the recommendation, as collecting, summarizing, and using fidelity and student outcome data are a major component of the interventions.

- In Bradshaw et al. (2010), the intervention included the development of a formal system to collect, analyze, and use disciplinary data for data-based decision-making regarding outcomes and program implementation.
- In Horner et al. (2018), the intervention included identifying ways to gather fidelity and outcome data, analyzing those data, and using what was learned from the data analysis to refine action plans.
- In Bradshaw et al. (2018), the intervention included a structured, data-based problem-solving process used to facilitate changes in teacher practices.
- In Fabiano et al. (2018), the intervention included coaches reviewing classroom observational data with educators and helping to set educator goals based on the data.
- In Pas et al. (2018), the intervention included the adoption of data systems that supported consistent collection and analysis of implementation and outcome data.

TABLE C.6: Studies Informing Recommendation 4: Collect, summarize, and use fidelity and student outcome data at all levels for iterative decision-making and problem-solving by stakeholders

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC-Calculated Effect Size ^b
Bradshaw et al. (2010) RCT Meets WWC group design standards without reservations	37 public schools (consisting of 12,344 students) Student characteristics: •Enrolled in K-2 •52.9% male •45.1% African American •46.1% White •49% received free or reduced-price meals •12.9% received special education services	Elementary schools across 5 suburban and rural school districts in Maryland.	SW-PBIS: The intervention was implemented by following seven steps: (I) Forming a SW-PBIS team that included five to six teachers and an administrator. The SWPBIS team attended an initial 2-day summer training co-led by one of the SWPBIS developers followed by an annual 2-day booster training; (2) Receiving onsite support and technical assistance from a trained behavior support coach on at least a monthly basis; (3) Establishing 3 to 5 expectations for positive student behavior, which were posted around the school and were known to staff and students; (4) Developing lesson plans defining behavioral expectations for teaching students at the beginning of the school year and at least once a month thereafter; (5) Developing, consistently using, and reinforcing a school-wide system to reward students who exhibit the expected positive behavior; (6) Agreeing on what constitutes a behavioral violation, and students receiving consistent consequences for disciplinary infractions; and (7) Developing a formal system to collect, analyze, and use disciplinary data for databased decision-making.	Business-as-usual: Comparison group members continued business-as-usual practices with assurances that they would not conduct any SW-PBIS training for 4 years.	Proximal Outcome Domains Compliant student behavior: $g = 0.12$ Student social emotional functioning: $g = 0.07$ Distal Outcome Domains General mathematics achievement: $g = 0.03$ General literacy achievement: $g = 0.05$ Primary school academic achievement: $g = 0.00$
Bradshaw et al. (2018)	158 teachers (104 middle school and	6 elementary schools and 6 middle schools in a single district in Maryland.	Double Check Coaching: The intervention included 3 core components:	Business-as-usual:	Proximal Outcome Domains

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC-Calculated Effect Size ^b
RCT Meets WWC group design standards without reservations	54 elementary schools) Teacher characteristics: •85.4% female •75.3% White •12.0% Black •8.9% other race •33.5% early career (20 to 30 years old) •65.8% middle school teachers		(1) augmentations to the Tier 1 elements of SWPBIS; (2) a set of five 60-minute professional development trainings addressing five core domains of culturally responsive practices; and (3) individual classroom coaching using an adapted version of the Classroom Check-Up (CCU), which utilized structured problemsolving to facilitate changes in teacher practices.	Members of the control group implemented the following components: (1) augmentations to the Tier 1 elements of SW-PBIS; and (2) a set of five 60-minute professional development trainings addressing five core domains of culturally responsive practices.	Compliant student behavior: $g = 0.30$ Educator instructional practice (<i>individuallevel</i>): $g = 0.24$ Educator discipline practice (<i>individuallevel</i>): $g = 0.45$ *
Fabiano et al. (2018) RCT Meets WWC group design standards with reservations	89 elementary general education teachers Teacher characteristics: •94.4% female •95% White •3% Asian •1.5% Black •1% Hispanic/Latino	Elementary general education classroom teachers across K-5 grades in New Jersey and New York.	Teacher coaching supported by formative assessment: Teachers received four 30-minute weekly sessions of coaching, in which coaches provided support to teachers in discussing practice needs, reviewing classroom observational data, setting goals to use strategies, implementing plans, and monitoring progress. Coaching sessions were combined with the Classroom Strategies Assessment System (CSAS), a multidimensional classroom observation instrument for the assessment of and intervention in teachers' classroom practices.	Waitlisted control group: Members of the comparison group used business-as-usual practices.	Proximal Outcome Domains Educator instructional practice: $g = 0.23$ Educator discipline practice: $g = 0.54*$
Horner et al. (2018)	38 elementary schools Student characteristics:	Elementary schools in North Carolina and Oregon that implemented PBIS for at least a year with a team that met at least once a month,	Team-Initiated Problem Solving (TIPS): TIPS involves precisely defining problems, setting goals related to the problem, selecting contextually appropriate solutions, developing an action plan,	Waitlisted control group: Members of the comparison group used business-as-usual practices.	Proximal Outcome Domains Compliant student behavior:

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC-Calculated Effect Size ^b
Meets WWC group design standards without reservations	•47.3% White •23.2% African American •22.8% Hispanic •0.7% American Indian •1.7% Asian •4.3% multiple races •58.6% eligible for free or reduced- price lunch	and that had used the School-Wide Information System (SWIS) in the previous 6 months.	identifying ways to gather fidelity and outcome data, analyzing those data, and using what is learned from the data analysis to refine the action plans. PBIS teams in treatment schools received training on the TIPS model from district PBIS coaches.		g = 0.56 Distal Outcome Domains General mathematics achievement: g = 0.01 General literacy achievement: g = 0.05
Pas et al. (2019) QED Meets WWC group design standards with reservations	859 public elementary, middle, and high schools	Schools selected from across Maryland's 24 public school districts.	SW-PBIS: Schools received SW-PBIS training and implementation support. Initial and booster trainings were 2 days long and required schools to make a 3-year commitment to implementing SW-PBIS and identifying a four- to six-person team to attend training. These teams provided the schools with ongoing supports.	Business-as-usual: Members of the comparison group did not receive SW-PBIS training and implementation.	Proximal Outcome Domains Compliant student behavior: $g = 0.07$ Distal Outcome Domains General mathematics achievement: $g = 0.23$ General literacy achievement: $g = 0.01$

Notes: Each row in this table represents a study, as defined by the WWC. QED = quasi-experimental design; RCT = randomized controlled trial. ^a Sample size represents the maximum number of participants in the study. In some studies, the number of participants varied across the outcome measures.

^b Effect sizes presented are from the outcome closest to the end of the intervention. For brevity, only the domain average effect size and statistical significance are reported in this table.

^{* =} Statistically significant at the .05 level.

Recommendation 5: Implement the Organizational Systems Needed to Support the Initial Adoption and Sustained Use of Effective Practices with High Fidelity.

Recommendation 5 was informed by two studies of interventions with organizational systems to support initial adoption and sustained use of positive behavioral practices with high fidelity. One study meets WWC group design standards without reservations, ²⁰⁹ and the other study meets WWC group design standards with reservations. ²¹⁰

Evidence from both studies provides a direct test of the recommendation, as organizational systems supporting initial adoption and sustained use of positive behavioral practices with high fidelity are a major component of the interventions.

- In Bradshaw et al. (2010), the intervention included state-level implementation support via an SW-PBIS training and support system led and coordinated by the state.
- In Pas et al. (2019), the intervention included statewide training and coaching, ongoing supports throughout the school year, and statewide collection of school-level implementation data.

TABLE C.7: Studies Informing Recommendation 5: Implement the organizational systems needed to support the initial adoption and sustained use of effective practices with high fidelity

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
Bradshaw et al.	37 public schools	Elementary schools	SW-PBIS:	Business-as-usual:	Proximal
(2010)	(consisting of	across 5 suburban	The intervention was implemented by following	Comparison group members	Outcome
	12,344 students)	and rural school	seven steps:	continued business-as-usual	Domains
RCT		districts in	(1) Forming a SW-PBIS team that included five to six	practices with assurances that	
	Student	Maryland.	teachers and an administrator. The team attended a	they would not conduct any SW-	Compliant
Meets WWC	characteristics:		2-day summer training followed by an annual 2-day	PBIS training for 4 years.	student
group design	•Enrolled in K-2		booster training;		behavior:
standards	•52.9% male		(2) Receiving onsite support and technical assistance		g = 0.12
without	•45.1% African		from a trained behavior support coach on at least a		
reservations	American		monthly basis;		Student social
	•46.1% White		(3) Establishing 3 to 5 expectations for positive		emotional
	•49% received free		student behavior, which were posted around the		functioning:
	or reduced-price		school and were known to staff and students;		g = 0.07
	meals		(4) Developing lesson plans defining behavioral		
	•12.9% received		expectations for teaching students at the beginning of		Distal Outcome
	special education services		the school year and at least once a month thereafter; (5) Developing, consistently using, and reinforcing a		Domains
			school-wide system to reward students who exhibit		General
			the expected positive behavior;		mathematics
			(6) Agreeing on what constitutes a behavioral		achievement:
			violation, and students receiving consistent consequences for disciplinary infractions; and		g = 0.03
			(7) Developing a formal system to collect, analyze,		General literacy
			and use disciplinary data for data-based decision-		achievement:
			making.		g = 0.05
					Primary school academic
					achievement:
					g = 0.00

Study	Participants ^a	Setting	Intervention Condition	Comparison Condition	Outcome <u>Domain</u> and WWC- Calculated Effect Size ^b
Pas et al. (2019)	859 public	Schools selected	SW-PBIS:	Business-as-usual:	Proximal
	elementary,	from across	Schools received SW-PBIS training and	Members of the comparison	Outcome
QED	middle, and high	Maryland's 24	implementation support. Initial and booster trainings	group did not receive SW-PBIS	Domains
Meets WWC group design standards with reservations	schools	public school districts.	were 2 days long and required schools to make a 3- year commitment to implementing SW-PBIS and identifying a four- to six-person team to attend training. These teams provided the schools with ongoing supports.	training and implementation.	Compliant student behavior: $g = 0.07$
					Distal Outcome Domains
					General mathematics achievement: $g = 0.23$
					General literacy achievement: $g = 0.01$

Notes: Each row in this table represents a study, as defined by the WWC. QED = quasi-experimental design; RCT = randomized controlled trial. ^a Sample size represents the maximum number of participants in the study. In some studies, the number of participants varied across the outcome measures.

^b Effect sizes presented are from the outcome closest to the end of the intervention. For brevity, only the domain average effect size and statistical significance are reported in this table.

^{* =} Statistically significant at the .05 level.

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NOTE: Studies assessed as meeting What Works Clearinghouse standards and that informed the practice recommendations are indicated by **bold text** below, and are also included in Appendix C.

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Notes

¹ Epstein et al. (2008).

¹³ The focus of this guide is on whole-school or whole-class prosocial behavior practices. What Works Clearinghouse practice guides currently under development and future practice guides may focus on targeted or intensive, individualized prosocial behavior practices delivered to smaller groups of students or individual students as well as whole-school or whole-class supports that complement targeted and intensive interventions.

² Epstein et al. (2008); Fabiano et al. (2013); Owens et al. (2018); Visser et al. (2014).

³ Walker et al. (1996).

⁴ Costenbader & Markson (1998); Mayer & Sulzer-Azaroff (1990); Skiba et al. (1997); Atkins et al. (2002).

⁵ McIntosh, K., Sugai, G., & Simonsen, B. (2020).

⁶ Horner et al. (2005); Lewis & Sugai (1999).

⁷ Bradshaw et al. (2010).

⁸ Ward & Gersten (2019); Individuals with Disabilities Education Act (IDEA); No Child Left Behind Act of 2001 (2002); Every Student Succeeds Act (2015).

⁹ Horner et al. (1990).

¹⁰ Benner, Nelson, Sanders, & Ralston (2012); Bradshaw et al. (2012); Gietz & McIntosh (2014).

¹¹ The expert panel only examined evidence from group design studies. Studies with single case designs as well as group design studies of branded interventions were not reviewed.

¹² Qualified related service providers and qualified school-based mental health practitioners include school counselors and other state-licensed or -certified mental health professionals qualified under State law to provide mental health services to children and adolescents. Please refer to IDEA Section 300.156 and Every Student Succeeds Act (2015).

¹⁴ The Reducing Behavior Problems in the Elementary School Classroom practice guide, published in 2008, offers five recommendations pertaining to classroom behavior management. Although these recommendations remain relevant today, more than a decade of policy development, practical experience, and research has passed since the guide was created. Therefore, this present guide will focus on recent research to generate updated recommendations that will assist practitioners with their efforts to promote positive behavior for all students in classrooms and schools.

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15 Review Protocol.
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¹⁶ Klingner et al. (2005).

¹⁷ Bradshaw et al. (2018); Leverson et al. (2019).

¹⁸ McIntosh (2019).

¹⁹ Within this guide, family refers to a student's caregivers or guardian.

²⁰ Kincade et al. (2020); Korpershoek et al. (2016); McLeod et al. (2017); Sutherland et al. (2019).

²¹ Webster-Stratton & Reid (2018).

²² Pianta et al. (2008).

²³ Sutherland et al. (2020).

²⁴ Brock et al. (2008).

²⁵ Sandilos et al. (2017).

²⁶ Webster-Stratton & Reid (2018).

²⁷ Weist et al. (2017).

²⁸ Mapp & Hong (2010).

²⁹ Leverson et al. (2019).

³⁰ Fraser (2008).

³¹ Leverson et al. (2019).

³² National Center for Education Statistics (2013).

- ³³ Bottiani et al. (2017); Bradshaw et al. (2010); Ehrenberg et al. (1995).
- ³⁴ McIntosh (2019).
- ³⁵ Domitrovich et al. (2008); Elliott & Mihalic (2004).
- ³⁶ McIntosh et al. (2013).
- ³⁷ Sugai & Horner (2006).
- ³⁸ Mathews et al. (2014).
- ³⁹ Mathews et al. (2014).
- ⁴⁰ Coffey & Horner (2012); McIntosh et al. (2013).
- 41 Blasé & Fixsen (2004).
- ⁴² McIntosh et al. (2013).
- ⁴³ Fixsen et al. (2019); Metz & Louison (2019).
- 44 Horner et al. (2014).
- ⁴⁵ Owens et al. (2020); Bradshaw et al. (2020).
- ⁴⁶ Swain-Bradway et al. (2015).
- 47 Bradshaw et al. (2008).
- ⁴⁸ Reinke et al. (2013).
- ⁴⁹ Bradshaw et al. (2010); Horner et al. (2018).
- ⁵⁰ Berg (2018); Ottmar et al. (2013); Pas et al. (2019).
- 51 See https://www.pbis.org/pbis/tier-1
- ⁵² See https://www.pbis.org/resource/expectations-matrix-poster
- ⁵³ Simonsen et al. (2017).
- ⁵⁴ See https://www.wisconsinrticenter.org/school-implementation/engage-stakeholders/
- ⁵⁵ Research shows that for children to learn general behavioral rules, it is helpful to teach each expectation in several different locations and times. Wong et al. (2005); Algozzine et al. (2011).
- ⁵⁶ Bradshaw et al. (2008).
- ⁵⁷ Cameron & Pierce (1994); Cameron et al. (2001).
- ⁵⁸ Scott (2017); Myers et al. (2011).

- ⁵⁹ Pinkelman et al. (2015).
- ⁶⁰ Greene et al. (2002); Ingersoll (2001).
- ⁶¹McIntosh et al. (2020).
- 62 Costenbader & Markson (1998); Skiba et al. (1997); Sugai et al. (2002).
- ⁶³ Sugai (2005); Lewis & Sugai (1999).
- ⁶⁴ Missouri Schoolwide Positive Behavior Support Tier 1 Implementation Guide (2019-2020). Can be accessed at https://pbismissouri.org/wp-content/uploads/2020/03/2019-20-SW-PBSTier1-IG-3.26.20.pdf
- 65 Owens et al. (2020).
- ⁶⁶ Scott (2017); Myers et al. (2011).
- ⁶⁷ Bradshaw et al. (2010); Horner et al. (2018).
- 68 Berg (2018); Ottmar et al. (2013); Pas et al. (2019).
- 69 Leach & Helf (2016).
- ⁷⁰ Missouri Schoolwide Positive Behavior Support Tier 1 Implementation Guide (2019-2020). Can be accessed at https://pbismissouri.org/wp-content/uploads/2020/03/2019-20-SW-PBSTier1-IG-3.26.20.pdf

 $\frac{files.com/5d3725188825e071f1670246/5d65b0e545315207b297d7c3_supporting\%20}{and\%20responding\%20to\%20behavior.pdf}$

- ⁷⁴ Simonsen et al. (2008).
- 75 2012-2017 Strategic Plan for Maryland.
- ⁷⁶ McIntosh et al. (2008); Scott et al. (2011).
- 77 Hershfeldt et al. (2011).
- ⁷⁸ See https://www.naacpldf.org/files/about-us/Bias_Reportv2017_30_11_FINAL.pdf

⁷¹ Cook et al. (2018).

⁷² Sprague & Walker (2005).

⁷³ Pennsylvania Training and Technical Assistance Network, can be accessed at https://assets-global.website-

- ⁷⁹ Gaias et al. (2019).
- 80 McIntosh et. al (2020).
- 81 McIntosh et. al (2020).
- 82 McIntosh (2019).
- 83 Hershfeldt et al. (2009); Bradshaw et al. (2018).
- ⁸⁴ Costenbader & Markson (1998); Mayer & Sulzer-Azaroff (1990); Skiba et al. (1997).
- ⁸⁵ This site was developed using funding by the U.S. Department of Education, Institute of Education Sciences (Award R305A130375) that was awarded to Principal Investigator Dr. Wendy M. Reinke.
- 86 Simonsen et al. (2020).
- ⁸⁷ Reinke et al. (2008).
- 88 Simonsen et al. (2008).
- 89 Jackson et al. (2018).
- 90 Domitrovich et al. (2008); Wandersman et al. (2008).
- 91 Pas & Bradshaw (2012).
- ⁹² Meta-analyses continue to identify coaching as a critical addition to training if practitioner fidelity and recipient outcomes are to be reproduced in classrooms. Kretlow & Bartholomew (2010); Kraft et al. (2018); Fixsen et al. (2019); Fabiano et al. (2018).
- 93 Driscoll et al. (2011); Hagermoser Sanetti et al. (2018); Pas et al. (2014).
- ⁹⁴ For example, Driscoll et al. (2011) found teachers were 13 times more likely to implement mandatory interventions when they had access to a coach. Other research has yielded similar results (Forman et al. [2009]; Ransford et al. [2009]; Wenz-Gross & Upshur [2012]; Stormont et al. (2013). These reviews suggested several activities including assessment, performance feedback, and planning are key elements of coaching.
- 95 Freeman et al. (2014); Oliver & Reschly (2010); Kraft et al. (2018).

- ⁹⁶ Driscoll et al. (2011); Forman et al. (2009); Ransford et al. (2009); Wenz-Gross & Upshur (2012); Stormont et al. (2013); Bradshaw et al. (2018); Fabiano et al. (2018).
- ⁹⁷ Reinke et al. (2008).
- ⁹⁸ Denton et al. (2003); Joyce & Showers (2002); Darling-Hammond et al. (2017); Fixsen et al. (2005); Kraft et al. (2018).
- ⁹⁹ Sugai & Horner (2006).
- 100 Reinke et al. (2012).
- 101 Pas et al. (2019).
- ¹⁰² Bradshaw et al. (2018).
- ¹⁰³ Lee et al. (2014).
- ¹⁰⁴ Gion et al. (2020).
- 105 Miller & Rollnick (2012).
- ¹⁰⁶ Coles et al. (2015); Owens et al. (2017); Lyon et al. (2019); Lee et al. (2014).
- ¹⁰⁷ Sugai & Horner (2006).
- ¹⁰⁸ Bradshaw et al. (2018); Horner et al. (2018)
- ¹⁰⁹ Fabiano et al. (2018)
- 110 Fixsen et al. (2019).
- 111 https://www.pbis.org/topics/coaching
- ¹¹² Fixsen et al. (2019).
- ¹¹³ Fixsen et al. (2019).
- 114 Nobori (2011).
- ¹¹⁵ See https://pbismissouri.org/wp-content/uploads/2020/03/2019-20-SW-PBSTier1-IG-3.26.20.pdf
- 116 Fixsen et al. (2019).
- 117 See https://pbismissouri.org/wp-content/uploads/2018/08/Tier-1-2018_Ch.-9.pdf
- 118 Owens et al. (2020).
- ¹¹⁹ Simonsen et al. (2014); Myers et al. (2011); Grasley-Boy et al. (2019).
- ¹²⁰ Sugai & Horner (2006).
- ¹²¹ Bedlington et al. (1996); Joyce & Showers (2002).

- ¹²² Smart et al. (1979); Joyce & Showers (2002).
- ¹²³ Alexander (2010); Whitmore (1992).
- ¹²⁴ Blase et al. (1984); Joyce & Showers (2002); Kealey et al. (2000); see Massar (2018) for the empirical support for each listed function.
- ¹²⁵ Reinke et al. (2008).
- ¹²⁶ Herman et al. (2021); Frey et al. (2013a).
- 127 Miller & Rollnick (2012).
- ¹²⁸ Conroy et al. (2014); Conroy et al. (2019); Fox et al. (2011); Hemmeter et al. (2011); Sutherland et al. (2015); Sutherland et al. (2020).
- ¹²⁹ The unique skills associated with motivational interviewing-based coaching were synthesized in Lee et al. (2014) and Herman et al. (2014), who described not only process and relational components, but also the technical component of motivational interviewing.
- ¹³⁰ Lee et al. (2014); Frey et al. (2020); Frey et al. (in press).
- ¹³¹ Magill et al. (2014); Miller & Rose (2009).
- ¹³² Andrzejewski et al. (2001); Miller et al. (2004); Morgenstern et al. (2001).
- ¹³³ Mitcheson et al. (2009) show that learning motivational interviewing is vulnerable to oversimplification; they indicate motivational interviewing is intuitive, but misleading, as the difficulty of the practice is often obscured by what appears simple. Research consistently demonstrates self-study nor workshop-only training efforts are enough to learn to practice motivational interviewing skillfully (Baer et al. 2004; Davis 1998; Miller et al. 2004; Sholomskas et al. 2005; Walters et al. 2005).
- ¹³⁴ Herman et al. (2021); Frey et al. (2020).
- 135 Apodaca & Longbaugh (2009); Romano & Peters (2015).
- ¹³⁶ Frey et al. (2017).
- ¹³⁷ A stand-alone Coaching Best Practices workshop covering a four-step coaching model (Reinke et al. 2014) and four MITAS modules designed to train coaches to use motivational interviewing proficiently within the four-step coaching model

(Frey et al. 2013a), simulated practice with performance feedback sessions, authentic practice, and a learning community (as shown in Figure 3.6).

¹³⁸ MITAS has been used by several education research teams who consider skillful motivational interviewing to be a core component of implementation fidelity; see Frey et al. (2017); Iachini et al. (2018); Lee et al. (in press); O'Brennan et al. (2020); Small et al. (2020); Suldo et al. (2021); Suldo et al. (2018); Warner et al. (2018).

- ¹³⁹ Leverson et al. (2019).
- ¹⁴⁰ Fixsen et al. (2019).
- ¹⁴¹ A <u>Revised Classroom Management: Self-Assessment</u> (Simonsen et al. 2006) can be used to help determine which effective general classroom management practices are in place.
- ¹⁴² Moyers et al. (2014).
- ¹⁴³ See Teacher Evaluation Inventory for Coaching Intervention as an example of a six-item, five-point Likert-type scale survey and three open-ended questions related to strengths and areas for improvement related to the coaching intervention (Massar 2018).
- ¹⁴⁴ Lopez & Nastasi (2008).
- 145 Reinke et al. (2011).
- ¹⁴⁶ See https://nirn.fpg.unc.edu/module-1/implementation-drivers/competency
- ¹⁴⁷ Bedlington et al. (1996); Joyce & Showers (2002).
- ¹⁴⁸ Smart et al. (1979); Joyce & Showers (2002)
- ¹⁴⁹ Alexander (2010); Whitmore (1992).
- ¹⁵⁰ Wehby et al. (2012).
- ¹⁵¹ For more details, see cost-effectiveness study by Owens et al. (2020).
- ¹⁵² Horner et al. (2018).
- ¹⁵³ See https://www.pbis.org/topics/data-based-decision-making
- ¹⁵⁴ Newton et al. (2012); Horner et al. (2017).
- ¹⁵⁵ OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports (2015).

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156 Bradshaw et al. (2010); Horner et al. (2018); Bradshaw et al. (2018).
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https://dibels.uoregon.edu/ and

https://www.pearsonassessments.com/professional-assessments/digital-solutions/aimsweb/about.html

¹⁵⁷ Fabiano et al. (2018); Pas et al. (2019).

¹⁵⁸ Horner et al. (2017).

¹⁵⁹ See https://www.pbis.org/topics/data-based-decision-making

¹⁶⁰ Bradshaw et al. (2008); McIntosh et al. (2017).

¹⁶¹ May et al. (2021).

¹⁶² McIntosh et al. (2014).

¹⁶³ Preston et al. (2015).

¹⁶⁴ See https://www.pbis.org/topics/data-based-decision-making

¹⁶⁵ Metz & Louisin (2019).

¹⁶⁶ Preston et al. (2015).

¹⁶⁷ OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports (2015).

¹⁶⁸ Horner et al. (2017).

¹⁶⁹ Bradshaw et al. (2018).

¹⁷⁰ Horner et al. (2014); Horner et al. (2018).

¹⁷¹ See https://www.pbisapps.org/Applications/Pages/SWIS-Suite.aspx;

¹⁷² See <u>PBIS Blueprint</u> and <u>PBIS District Systems Fidelity Inventory</u>

¹⁷³ See <u>Treatment Integrity for Elementary Settings (TIES) - Teacher Report Form</u> and <u>La Salle et al. (2018).</u>

¹⁷⁴ Please note that the TIES - Teacher Report Form has not been published but was used in BEST in Class research (Sutherland et al. 2020).

¹⁷⁵ Horner et al. (2018).

¹⁷⁶ Horner et al. (2018).

¹⁷⁷ Domitrovich et al. (2008); Eiraldi et al. (2015).

¹⁷⁸ Sugai & Horner (2009).

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<sup>179</sup> See <a href="https://www.pbis.org/topics/districtstate-pbis">https://www.pbis.org/topics/districtstate-pbis</a>
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- ¹⁸⁰ George et al. (2018).
- ¹⁸¹ Horner et al. (2017).
- ¹⁸² Horner et al. (2018).
- ¹⁸³ Bradshaw et al. (2010).
- ¹⁸⁴ Pas et al. (2019).
- ¹⁸⁵ Center on Positive Behavioral Interventions and Supports (2019a).
- ¹⁸⁶ Center on Positive Behavioral Interventions and Supports (2019b).
- ¹⁸⁷ Lever et al. (2014).
- ¹⁸⁸ Center on Positive Behavioral Interventions and Supports (2019a; 2019b).
- ¹⁸⁹ Horner et al. (2014).
- ¹⁹⁰ Horner et al. (2018).
- ¹⁹¹ Horner et al. (2018).
- ¹⁹² Center on Positive Behavioral Interventions and Supports (2019a).
- ¹⁹³ Fixsen et al. (2019).
- ¹⁹⁴ Fixsen et al. (2019).
- 195 National Implementation Research Network (n.d.).
- ¹⁹⁶ National Implementation Research Network (n.d.).
- ¹⁹⁷ Center on Positive Behavioral Interventions and Supports (2019a; 2019b).
- ¹⁹⁸ Putnam et al. (2009).
- ¹⁹⁹ Flook et al. (2010), Smith (2010), and Fedewa et al. (2015) were assessed as meeting WWC group design standards without reservations but were not mapped to any recommendation as the experts did not think the interventions aligned with the recommendations of the panel. These study reviews are hyperlinked in the References list.
- ²⁰⁰ Bradshaw et al. (2010); Horner et al. (2018).
- ²⁰¹ Berg (2018); Pas et al. (2019); Ottmar et al. (2013).
- 202 Ottmar et al. (2013) does not have findings in any of the proximal outcome domains.
- ²⁰³ Bradshaw et al. (2010); Horner et al. (2018).

- ²⁰⁴ Berg (2018); Pas et al. (2019); Ottmar et al. (2013).
- ²⁰⁵ Horner et al. (2018); Bradshaw et al. (2018).
- ²⁰⁶ Fabiano et al. (2018).
- ²⁰⁷ Bradshaw et al. (2010); Horner et al. (2018); Bradshaw et al. (2018).
- ²⁰⁸ Pas et al. (2019); Fabiano et al. (2018).
- ²⁰⁹ Bradshaw et al. (2010).
- ²¹⁰ Pas et al. (2019).