The chapters in the previous sections reveal that there are many reasons for optimism regarding schooling for students with disabilities and the potential for improved outcomes in school and in life for these individuals. In the US, students with a full range of disabilities are currently included in general education settings more than ever before. To better support these students in effective inclusive schools, we have gained a better understanding of the critical role that principals play in developing and supporting improved outcomes for students with disabilities and how to better prepare teachers through teacher education and continuing professional development for their varied roles in these settings. Advances have also been made in the use of effective instructional and behavioral interventions that have resulted in improved outcomes for many students with disabilities. Furthermore, substantial changes are occurring in schools, as major initiatives are underway to alter the structures in which services are delivered to students with disabilities and others who struggle academically and/or behaviorally (e.g., multi-tiered systems of support, Positive Behavioral Interventions and Supports (PBIS)), and how accountability is monitored to ensure the effectiveness of interventions and the progress that students make academically and behaviorally.

In this final section, we address topics that are critical to providing schools with the systemic support needed for the development of schools that are both effective and inclusive. Chapter 20 describes the role of district-level leadership teams in supporting the implementation of school-wide initiatives while using PBIS as an illustrative example. Critical functions of district leadership teams for building the systems to implement, sustain, and scale up tiered behavior supports in schools to improve outcomes for all student groups are described. This chapter also offers recommendations for practice regarding how to increase district capacity to support schools in developing systems of support that improve student outcomes. Then in Chapter 21, the components and use of implementation science at a school level are described. A case illustration of school change is then employed to demonstrate how the components of implementation science are used to support schools as they implement effective practices (e.g., high-leverage practices and evidence-based practices) to improve outcomes for all students.

Chapter 22 addresses the importance of providing an equitable educational experience for students with an array of backgrounds and needs. The chapter initially provides a description of the
diversity of students who rely on schools to serve them well and then provides examples of the importance of inclusive schools for improved long-term outcomes. Finally, approaches that minimize or eliminate difficulties experienced by minoritized learners are described, including engaging families and tapping their funds of knowledge; providing culturally responsive instruction, intervention, and assessment; facilitating culturally and contextually appropriate referral and evaluation; and individualizing support.

Information in Chapter 23 provides a review of established and emerging technologies that may be used to promote inclusion and effective instruction in schools and classrooms. It includes strategies that elementary teachers can use to approach technology-mediated learning, specifically through high leverage practices and Universal Design for Learning. The chapter ends with practical considerations and examples for how elementary teachers may use technology to promote increased learning and engagement for all students.

In the final chapter, the editors of this Handbook provide considerations for supporting effective inclusive schools now and in the future. Initially, the chapter addresses the limited progress that has been made related to school improvement and student outcomes, despite considerable effort. Then the chapter describes what is known about why goals are sometimes not achieved and why school improvement efforts often fail. Finally, perspectives are provided regarding what can be done to promote conditions that support school improvement that is sustained over time.
Support for District Change and Improvement

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Setting the Stage

In an archaic view of education, the blame for an individual student’s lack of success was attributed to the student. Likewise, in a traditional view of educational systems change, any blame for the failure to implement effective school practices has been attributed to the individual teacher. Fortunately, behavioral science has demonstrated the factors (e.g., environmental context, empirically-supported practices) that promote success for students and adults, and implementation science has demonstrated factors (e.g., context, implementation drivers) that promote successful educational systems change. As the responsibility for implementing effective school practices has shifted from the individual educator to the school, there is increasing consensus that the responsibility for building capacity and sustainability is at the district level (McIntosh & Goodman, 2016).

District systems are often neglected because they are more removed from student learning than school systems, but they are vitally important (Fixsen et al., 2010; George & Kincaid, 2008; Strickland-Cohen et al., 2014). Recent research has shown that district variables are significant predictors of implementation and sustainability of school interventions (George et al., 2018; McIntosh et al., 2013; McIntosh et al., 2018). This chapter describes these variables, with attention to how district and state leaders can arrange their district initiatives to optimize effectiveness, efficiency, equity, and sustainability.
What Do We Know Based on Research and the Wisdom of Practice?

**Key District Functions for Supporting School Implementation**

We know much about key variables supporting the implementation of school practices from nearly three decades of researchers and technical assistance providers working with district and school leadership teams to support their implementation efforts of Positive Behavioral Intervention and Supports (PBIS; Barrett et al., 2008; George et al., 2018; George & Kincaid, 2008; Horner et al., 2010; Newton et al., 2012). In the early years of PBIS implementation, many of these key variables were identified by working directly with school leadership teams to establish successful model demonstration schools (i.e., positive exemplars; Netzel & Eber, 2003; Sugai & Horner, 2006). Since these early demonstrations, research has shown implementation of PBIS with fidelity impacts a host of important academic and social outcomes for children and youth (Horner et al., 2010; Mitchell et al., 2016, 2018). The majority of research conducted to date has been conducted at the elementary level. For example, Bradshaw and colleagues have documented improvements in social and academic engagement and reductions in overall levels of problem behavior (Bradshaw et al., 2008, 2010, 2012). Reductions of aggressive and anti-social behavior have also been empirically demonstrated (Benedict et al., 2007; Farkas et al., 2012), along with reductions in bully behavior with increases in prosocial behavior and emotional regulation (Waasdorp et al., 2012). Embedding differentiated academic supports within a PBIS framework also has demonstrated an additive impact on both academics and behavior (Chaparro et al., 2012; Gage et al., 2013).

Given the core elements of PBIS focus on explicitly teaching and practicing expected social, emotional, and behavioral expectations across all classroom and non-classroom settings, the logic of school-wide PBIS fits in well in the overall mission of elementary schools (Horner et al., 2010). As implementation efforts shifted to scaling-up (i.e., broadening the delivery of PBIS; Hagermoser Sanetti & Collier-Meek, 2019) and sustaining PBIS within districts (i.e., implementing with high fidelity of implementation over time; McIntosh et al., 2018), some key district variables have been found to facilitate implementation in schools (Barrett et al., 2008; George et al., 2018; Kittelman et al., 2020; McIntosh et al., 2018). Many of these lessons learned have been distilled into a single document, the PBIS Implementation Blueprint (Center on Positive Behavioral Interventions and Supports, 2015), which describes PBIS in particular but can be applicable to a wide range of complex school practices (Fixsen et al., 2005).

Figure 20.1 provides a graphic of key functions of organizational implementation of educational initiatives, which are applicable to agencies at the state, region, and district. In the center of the figure is leadership teaming. The functions above the team are the executive functions, and the functions below the team are implementation functions. This section will begin by describing teaming, followed by descriptions of each of the related functions in turn.

**District Leadership Teaming**

Although district leadership teams have a larger scope and reach than school leadership teams, both have some similar roles and functions. Table 20.1 provides a summary of these similarities between the district and school leadership teams. Similar to school leadership teams, district teams include key individuals with the authority, knowledge, experience, and skills to carry out specific implementation activities. Key individuals include district and school personnel (e.g., administrators, general and special education teachers, school psychologists, counselors, district coaches/coordinators) and community stakeholders (e.g., parents, business partners, healthcare providers, community mental health providers).
As described in Table 20.1, district leadership teams have unique responsibilities related to providing the vision, resources (e.g., funding, technical assistance), and coordination to support school leadership teams in their implementation efforts. For example, district and school administrators assist in providing visibility, political support, and funding for PBIS implementation efforts. Administrators showing public support and enthusiasm for implementation efforts is important for school personnel and community stakeholder buy-in and perceived to be critical for successful implementation of large-scale initiatives (Forman et al., 2009; George et al., 2018; Langley et al., 2010). General and special education teachers are integral for ensuring that district leadership teams have representation from those implementing practices in the classroom (Strickland-Cohen et al., 2014). This representation is especially important because stronger implementation of Tier 1 classroom practices is associated with sustained implementation of PBIS in schools, improved student outcomes, and improved racial/ethnic equity in student outcomes (Childs et al., 2016; Mathews et al., 2014; Tobin & Vincent, 2011). Classroom teachers help to contextualize implementation efforts (e.g., embed evidence-based practices into classroom routines) and address potential barriers during implementation.

Other district and school personnel include those with content expertise and experience implementing PBIS systems and social-emotional-behavioral practices (Goodman-Scott, 2013). These individuals often include school psychologists, counselors, and behavior specialists, who may hold dual roles as coordinators and district coaches (George & Kincaid, 2008). Depending on the size of the school district and resources for district implementation, larger districts may have multiple coordinators and coaches on district leadership teams (George et al., 2018). These individuals typically work directly with school leadership teams to: (a) conduct annual external evaluations of fidelity of implementation, (b) help guide action planning activities, and (c) provide training and coaching on implementing evidence-based practices, systems, and assessment tools (Bastable et al., 2020; Center on Positive Behavioral Interventions and Supports, 2020a; George et al., 2018).

In addition, community stakeholders (e.g., parents, school board members, social workers, business leaders, healthcare providers, community mental health providers) provide valuable input and external resources for implementation as active members of district leadership teams (e.g., ensuring practices are culturally responsive, engaging families in implementation activities; Center...
Table 20.1 Activities and Functions of District and School Leadership Teams

<table>
<thead>
<tr>
<th>District Leadership Teams</th>
<th>School Leadership Teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Define a unified vision for the district with measures used to assess the success of efforts to reach that vision.</td>
<td>• Align school vision and policies (i.e., school personnel and student handbooks) with district vision.</td>
</tr>
<tr>
<td>• Obtain and allocate funding to support school implementation efforts (i.e., training, coaching, buy-out of school personnel time for professional development activities).</td>
<td>• Allocate funding for school implementation activities (e.g., professional development, materials for implementation, incentive systems).</td>
</tr>
<tr>
<td>• Develop policies and strategies for engaging and communicating with stakeholders (i.e., family and community members) on implementation efforts and student outcomes.</td>
<td>• Engage and communicate with stakeholders on implementation efforts and student outcomes using district strategies.</td>
</tr>
<tr>
<td>• Develop and apply human resources policies to select, train, coach, and evaluate school and district personnel who will implement evidence-based practices.</td>
<td>• Use district human resource guidelines to select, coach, and evaluate school personnel who will implement evidence-based practices.</td>
</tr>
<tr>
<td>• Identify and promote the use of a standard set of evidence-based, multi-tiered practices, systems, and assessment tools.</td>
<td>• Implement district-recommended evidence-based practices, systems, and assessment tools.</td>
</tr>
<tr>
<td>• Develop 3-5 year evaluation plan to assess implementation progress and student outcomes.</td>
<td>• At least annually assess and evaluate implementation progress and student outcomes.</td>
</tr>
<tr>
<td>• Coordinate and assist school teams in developing action plans to improve implementation efforts.</td>
<td>• Regularly assess, evaluate, and develop action plans to improve implementation efforts.</td>
</tr>
<tr>
<td>• Provide differentiated training and ongoing coaching to support school leadership teams. Allocate FTE for coaching of trained skills and implementing evidence-based practices.</td>
<td>• Provide training to incoming and returning school personnel on PBIS implementation.</td>
</tr>
<tr>
<td>• Identify model demonstration exemplars.</td>
<td>• Contextualize implementation efforts to align with staff, student, and stakeholder community values.</td>
</tr>
<tr>
<td></td>
<td>• Increase district capacity to support schools implementing evidence-based practices.</td>
</tr>
<tr>
<td></td>
<td>• Scale-up PBIS within districts.</td>
</tr>
</tbody>
</table>

on Positive Behavioral Interventions and Supports, 2020a; Horner et al., 2017; Langley et al., 2010). Their participation can be especially helpful for preventing known barriers to student participation in evidence-based practices. For example, Langley et al. (2010) conducted structured interviews with district and school mental health clinicians and program directors to identify variables perceived to have facilitated or inhibited the implementation of a manualized evidence-based Tier 2 social-emotional-behavioral practice (Cognitive Behavioral Intervention for Trauma in Schools; Jaycox, 2004). The authors found that a lack of family engagement was the highest-rated barrier among successful implementers and the second highest-rated barrier among non-successful implementers. In addition, Kittelman et al. (2019) found that the percentage of students within districts receiving free or reduced lunch was a significant predictor for the rate of schools within districts adopting PBIS. As many students living in poverty are likely to need additional social and mental health services (Cappella et al., 2008), broadening the team to include community stakeholders can increase the district capacity to support students needing social and mental health services (e.g., identify additional resources within the community, obtaining external grant funding for resources).
Executive Functions

Some of the key activities of district leadership teams are to define, provide resources for, and engage district and school personnel and stakeholders in PBIS implementation efforts. These activities can be organized into four executive functions: stakeholder engagement, funding and alignment, policy, and workforce capacity.

Stakeholder Engagement

A key executive function of the district leadership team is to establish an array of strategies for engaging stakeholders in district implementation efforts. These strategies include gathering stakeholder input on district goal setting and policy development, disseminating information on PBIS implementation and district outcomes, and encouraging district leaders to participate in implementation activities and events with stakeholders (Center on Positive Behavioral Interventions and Supports, 2020a; Garbacz et al., 2017; Minch et al., 2017). Including stakeholders in district goal setting and policy development activities is useful for ensuring that community stakeholders value district improvement goals. Input can be gathered through surveys sent to families, organizing public meetings, and gathering feedback from stakeholders serving on district leadership teams. In addition to goal identification, district leadership teams can assist school leadership teams by creating clear policies and guidelines for how to actively engage stakeholders in PBIS implementation activities beyond only school-sponsored PBIS events (Garbacz et al., 2017). For example, these policies may provide incentives for encouraging school personnel to identify creative strategies to strengthen home-to-school communications when students are receiving Tier 2 and 3 support (Minch et al., 2017).

In addition, district leadership teams can identify and promote a range of strategies for disseminating information to stakeholders related to PBIS implementation and student outcomes (Center on Positive Behavioral Interventions and Supports, 2020a). These strategies may include dedicating a portion of district and school websites to sharing information about PBIS implementation activities and student data associated with district improvement goals, sending letters to new families describing PBIS efforts and activities, and sharing brief evaluation reports to stakeholders on PBIS implementation and student improvement goals. Finally, teams can cultivate stakeholder partnerships by ensuring that district leaders, such as school board members and superintendents, attend school-sponsored activities and events related to the initiative. District leaders play important roles in providing visible support of PBIS implementation and can help articulate to stakeholders how PBIS efforts are aligned with district improvement goals (Minch et al., 2017).

Funding and Alignment

Another executive function of the district leadership team is to obtain and allocate funding for implementation efforts (Center on Positive Behavioral Interventions and Supports, 2020a). Strategies helpful for securing funding for district implementation activities include demonstrating to district and state leaders (e.g., school board members) how investing in PBIS leads to improved district outcomes and partnering with state and district-level practitioners and university researchers to seek external funding from state and federal grants (Goodman-Scott, 2013; Strickland-Cohen et al., 2014). District budget plans are useful for dedicating funding to support school leadership teams for their implementation efforts. For example, it is unlikely that school leadership teams have the funding needed to hire internal PBIS coaches. Therefore, district leadership teams are more likely to hire a small number of district coaches to assist schools with their implementation efforts (e.g., provide coaching on implementing Tier 3 practices, assisting school teams with progress monitoring; Bastable et al., 2020; George & Kincaid, 2008). From George and Kincaid’s experiences supporting district leadership teams in Florida (George & Kincaid, 2008), they suggested that leadership teams consider allocating as much as 50% of a district coach or coordinator’s time to supporting up to six schools in a district and
100% of their salary for supporting up to 10 schools. Additional funding is also often allocated for other professional development activities, such as buying out school personnel time for professional development (e.g., summer training) and sending district and school leadership teams to receive external professional development through attending state or regional practitioner-orientated conferences (George & Kincaid, 2008; Strickland-Cohen et al., 2014).

Scarcity of funding for PBIS implementation is a reoccurring barrier faced by many district and school leadership teams (Coffey & Horner, 2012; Netzel & Eber, 2003; Pinkelman et al., 2015). As an example, Pinkelman et al. (2015) interviewed school personnel from over 800 schools implementing PBIS and found that a lack of funding was one of the top three perceived barriers affecting sustained PBIS implementation in schools. Additionally, one school member noted that their school did not have a required budget for PBIS implementation and was implemented with minimal funding (Pinkelman et al., 2015). District budget plans can also be useful in aligning funding allocated for separate, often competing for initiatives under one integrated PBIS budget (Kittelman et al., 2020; Pinkelman et al., 2015). If multiple initiatives are being implemented to address a similar outcome (e.g., improve equity in school discipline), it may present an opportunity for district leadership teams to save on funding by combining siloed work. For example, a district leadership team may decide to implement equity-focused behavior support as part of their Tier 1 preventative practices rather than continue funding a separate and standalone attendance intervention that may be costly in terms of personnel time, materials, and space. Such efforts have been shown to be successful, even with the pernicious problems of inequity (McIntosh et al., in press; McIntosh et al., 2020).

Policy
Numerous policies exist in school districts (e.g., school board policies, district and school administrative policies). Horner (2020) described that effective policies should serve to (a) create a shared vision or mission that aligns the implementation of evidence-based practices with core district beliefs and values (e.g., educational equity for all students, improve social-emotional competency), (b) provides motivation and incentives to engage in using these practices, and (c) defines the resources (i.e., funding, organizational systems) needed to implement the practices. Strong alignment is achieved when policies at different levels (school board, district, and school) are consistent and include these key features. Ensuring that these policies are in place is an important and early implementation step for district leadership teams, as it provides direction to school leadership teams on how to align their policies (as found in district discipline policies and school handbooks) with the values and mission of the district (Pinkelman & Horner, 2019). Additionally, these policies help to build district priority for improving student outcomes (Green et al., 2015; Horner, 2020), which has been found to be a significant predictor of sustained implementation of Tier 1 PBIS systems and practices in schools (McIntosh et al., 2013).

Workforce Capacity
Turnover among district and school personnel is a well-documented barrier to implementing evidence-based practices in schools (Coffey & Horner, 2012; Flannery et al., 2009; Forman et al., 2009; Kittelman et al., 2020; McIntosh et al., 2014; Pinkelman et al., 2015; Turri et al., 2016). As an example, turnover among school leadership team members has been perceived as a powerful barrier to PBIS implementation (Kittelman et al., 2020). Although some degree of turnover is inevitable, several strategies can be helpful for ensuring that district leadership teams maintain the capacity to support PBIS implementation over time. First, it is critical to recruit and hire district and school personnel that have knowledge and skills in implementing PBIS (Blase et al., 2013). Hiring school personnel with experience working in schools implementing PBIS is likely to reduce professional development costs (already trained on PBIS practices and systems) and increase the likelihood they
buy into PBIS (Bambara et al., 2009; George et al., 2018). Additionally, hiring personnel with expertise in developing behavioral supports and interventions is beneficial for implementing evidence-based advanced tiers with fidelity. For example, Bambara et al. (2009) conducted interviews with different stakeholder groups (i.e., administrators, teachers, parents, district coaches) and found that one of the key barriers to implementing Tier 3 behavior supports was school personnel not having the skills to implement these complex practices. Second, those implementing PBIS may not be provided sufficient time for implementation activities (Kittelman et al., 2020; Pinkelman et al., 2015). To address this challenge, time for these activities (e.g., implementing Tier 3 practices, attending training) needs to be included within the job descriptions of the district and school personnel. As an example, for school psychologists also serving as district coaches, time for coaching (e.g., assisting school leadership teams with evaluation and action planning, data collection) needs to be explicitly built into their job descriptions in addition to their responsibilities as the school psychologist (Barrett et al., 2008; Bastable et al., 2020; George & Kincaid, 2008; Sullivan et al., 2011). Third, district leadership teams need to develop and use annual performance evaluations for new and returning district and school personnel to assess their knowledge and skills for initiative implementation. These data will be useful not only for evaluating their performances for the current year but also for informing future professional development activities (e.g., additional training on how to use data collection measures when implementing Tier 3 support plans).

Implementation Functions

The second set of functions of the district leadership team (in the lower section of Figure 20.1) includes support for school leadership teams with implementing the district-selected practices, systems, and tools through training, coaching, and evaluation (Bastable et al., 2020; George & Kincaid, 2008; George et al., 2018; Newton et al., 2011).

Training

Training is the first of several implementation strategies districts and school leadership teams use and is designed to teach new skills and knowledge to personnel (Massar, 2017). It is expected that a certain number of school PBIS trainings, or abbreviated refresher training, will occur each school year because of personnel turnover and implementation of Tier 2 and 3 systems (Turri et al., 2016). In planning and coordinating these training activities, it is helpful for district leadership teams to develop a three-to-five-year professional development calendar (Chaparro et al., 2012). In developing this calendar, it is useful for district team members to collect pre-training (baseline) data from the school sites (fidelity and student outcome) to help inform and tailor what training is needed and how much growth in fidelity can be expected. For example, Nese et al. (2018) found that the length of time from initial training to reaching adequate fidelity for elementary schools ranged from 1.82 to 2.30 years, middle schools ranged from 2.04 to 2.88 years, and for high schools from 2.31 to 3.8 years.

Table 20.2 provides an example of a five-year professional development plan developed by the Sunset School District leadership team (hypothetical school district). The district leadership team plans to implement PBIS in a step-wise pattern across the 12 schools in the district (six elementary, four middle schools, and two high schools), beginning with the elementary schools and one middle school in Year 1 (2022-2023 school year). This decision was made because the elementary school leadership teams were committed to the implementation and were most likely to reach adequate fidelity the quickest and the one middle school already had an established school leadership team and started implementing Tier 1 PBIS the previous year. In Year 2, the three remaining middle schools would begin Tier 1 implementation training, and in Year 3, the two high schools would begin Tier 1 implementation training.
Coaching

Coaching is another important (and often underused) function for supporting school leadership teams and personnel with using newly learned skills after the initial training has occurred (Bastable et al., 2020; Freeman et al., 2017; Massar, 2017). It is common for district leadership teams to allocate funding for coaching to assist school leadership teams and personnel with a variety of coaching activities to enhance implementation efforts (Bastable et al., 2020; Freeman et al., 2017; George & Kincaid, 2008). Coaching activities vary depending on each school’s stage of implementation and status (Fixsen et al., 2005; McIntosh et al., 2018). For example, a school leadership team in their first year of Tier 1 implementation may need coaching on how to run meetings effectively and efficiently (i.e., defining roles, preparing and reviewing student discipline data, making data-based decisions) compared to a school leadership team in their second year of Tier 2 implementation that needs support developing fading procedures for students receiving Tier 2 practices. Coaching can be conducted through one-on-one activities and facilitating communities of practice peer networks (i.e., assisting school team members with sharing resources and describing when and how to use them; see Table 20.2). Bastable et al., 2020 surveyed 264 school leadership team members to identify different types of coaching activities provided by internal and external coaches, including ones perceived as most important for Tier 1 PBIS and those related to Tier 1 fidelity. The authors found that the three most frequently used coaching activities included attending school leadership team meetings, listening to school personnel concerns, and assisting with team action planning. The top three perceived as being most important for Tier 1 implementation were assisting with team action planning, assisting with data collection, and sharing knowledge of PBIS systems, while those positively and significantly related to Tier 1 fidelity were running data reports for the team and modeling PBIS implementation (Bastable et al., 2020).

Evaluation

The third implementation element includes the use of evaluation systems to monitor fidelity and student outcomes. Similar to the three-to-five-year professional development plan, evaluation systems are useful for district leadership teams to establish a formal companion evaluation plan to document when evaluation activities will occur, what data will be collected (i.e., administering fidelity measures, school walkthroughs by district PBIS coaches), and how data will be shared with district and school personnel and community stakeholders (Center on Positive Behavioral Interventions and Supports, 2015). To complete these evaluation activities, it is the responsibility of

### Table 20.2 Five Year District Leadership Team Professional Development Calendar for Sunset School District

<table>
<thead>
<tr>
<th></th>
<th>2022-2023</th>
<th>2023-2024</th>
<th>2024-2025</th>
<th>2025-2026</th>
<th>2026-2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A:6 Elem,1 Middle</td>
<td>T1 training</td>
<td>T1 refresher</td>
<td>T1 refresher</td>
<td>T1 refresher</td>
<td>T1 refresher</td>
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<tr>
<td></td>
<td>T2 training</td>
<td>T2 training</td>
<td>T2 training</td>
<td>T2 training</td>
<td>T2 training</td>
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<tr>
<td>Group B:3 Middle</td>
<td>T1 training</td>
<td>T1 training</td>
<td>T1 training</td>
<td>T1 training</td>
<td>T2 training</td>
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<td></td>
<td>T3 training</td>
<td>T2 training</td>
<td>T3 training</td>
<td>T2 training</td>
<td>T3 training</td>
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<tr>
<td>Group C:2 High</td>
<td>T1 training</td>
<td>T1 training</td>
<td>T1 training</td>
<td>T1 training</td>
<td>T1 training</td>
</tr>
<tr>
<td>Coaching</td>
<td>0.6 FTE Coaching</td>
<td>1.0 FTE Coaching</td>
<td>1.5 FTE Coaching</td>
<td>1.5 FTE Coaching</td>
<td>1.5 FTE Coaching</td>
</tr>
<tr>
<td>Model Demonstrations</td>
<td>Identify model demonstration school(s)</td>
<td>Identify model demonstration school(s)</td>
<td>Identify model demonstration school(s)</td>
<td>Identify model demonstration school(s)</td>
<td>Identify model demonstration school(s)</td>
</tr>
<tr>
<td>Communities of Practice</td>
<td>Establish elementary community of practice</td>
<td>Establish secondary (middle/high) community of practice</td>
<td>Maintain community of practice groups</td>
<td>Maintain community of practice groups</td>
<td>Maintain community of practice groups</td>
</tr>
</tbody>
</table>
the district leadership team to identify, use, and promote highly efficient data evaluation systems that school leadership teams can use to enter data and generate reports for decision making (George et al., 2018; McIntosh et al., 2018). In semi-structured interviews with district leadership team members, George et al. (2018) reported that having strong district data infrastructures (e.g., for collecting discipline, behavior, and fidelity data) was perceived to be a major factor for strong district PBIS implementation among high-performing school districts. Moreover, McIntosh et al. (2018) also found that school leadership teams that regularly used data for decision making to improve implementation and student outcomes were more likely to sustain Tier 1 PBIS implementation with strong fidelity several years later.

Local Implementation Demonstrations

For district leadership teams in the early stages of implementation, it is common to first focus on piloting implementation efforts with a small number of model demonstration schools (Pinkelman & Horner, 2019). These successful demonstration schools help to build political and financial support for the initiative by demonstrating to district leaders in charge of funding (e.g., superintendents, school board members, administrators) that implementation of PBIS with strong fidelity results in improved student and school outcomes (Horner et al., 2019; Pinkelman & Horner, 2019). For example, Netzel and Eber (2003) described one district’s PBIS implementation efforts that began by piloting PBIS in one elementary school with high levels of suspensions. After one year of Tier 1 implementation, the leadership team saw a substantial drop in suspensions. Findings from the pilot school were shared with the superintendent and school board, and they expressed a need to expand the implementation of PBIS in the district. The following year, five schools in the district began Tier 1 implementation (Netzel & Eber, 2003).

Model demonstration schools are also highly valuable in helping district leadership teams scale up PBIS efforts within districts (Horner et al., 2019). For example, as the number of schools within districts implementing PBIS expand, additional model demonstration sites are useful for providing schools with successful demonstration across different school types (e.g., grade levels) and tiers of implementation (i.e., Tier 2, Tier 3; see Table 20.2). District leadership teams will also need to identify effective strategies for communicating information about these successful demonstrations to school leadership teams through professional development activities. For example, during a community of practice event facilitated by a district coach (see Table 20.2), the coach may have an elementary school leadership team share out regarding how they developed and implemented their incentive systems so that school leadership teams are able to learn from this exemplar. Finally, as the initiative starts to scale up, research has shown that when more schools in districts are implementing PBIS, they are more likely to continue implementing PBIS with high fidelity (McIntosh et al., 2018). This is evident from research showing that the proportion of schools in the district implementing PBIS is a significant predictor of sustained implementation of PBIS in schools over time (McIntosh et al., 2018).

Increasing District Capacity to Support School Practices

The process of scaling or expanding practices is seldom consistent or linear. Descriptive data summarizing the PBIS implementation process across the country point to an iterative or cyclical sequence of the stages of implementation (Fixsen et al., 2005, 2009), such that organizations may repeat stages as they move from one school to the next or different schools may be at different stages based upon readiness and capacity (Horner et al., 2014). The time necessary for a given stage varies based on many factors (e.g., district support, adequate time for professional development, principal commitment).
Notwithstanding, evaluation and measurement of capacity are present in each stage of implementation. As teams are exploring implementation, they begin by carefully self-assessing their current status (strengths and needs) and capacity to implement change, as well as existing, feasible options for pursuing change (Fixsen et al., 2005). This information can help assess readiness for change and identify initial systems, practices, and data decisions to improve student outcomes (Lewis et al., 2016). As teams progress to initial implementation, they begin to establish the capacity for scaling and expansion by measuring fidelity and outcomes as a means of evaluating the difference between proposed implementation and actual implementation. In light of unforeseen implementation barriers, assessing initial implementation allows organizations to reassess training, coaching, and evaluation needs (Horner et al., 2014). Advancing to full implementation involves operating all systemic components and a range of practices while being responsive to evaluation data by using the data to make decisions. It is this responsiveness to evaluation that propels teams to successful sustained implementation. Achieving sustained scaling requires teams to engage in cycles of continuous quality improvement, in which they are actively adapting systems and practices based upon evaluation to achieve better fidelity and outcomes (Horner et al., 2014).

**Measurement of District Capacity**

Scaling and expanding implementation requires teams to conduct both baseline and ongoing assessments to identify current areas of strength and areas for continued growth (Horner et al., 2014). There are several measurements and tools teams can use to self-assess what core elements of the framework are already in place and guide the development of planning for the next steps.

**District Capacity Assessment**

The District Capacity Assessment (DCA; Ward et al., 2015) is designed to help districts measure their capacity to support and advance school-level implementation of any innovation (i.e., intervention or initiative). The goal of the DCA is to provide the district team with information to better align resources with intended outcomes and develop action plans to facilitate meaningful school support. Through the DCA, the capacity of a district is assessed in terms of the necessary systems, activities, and resources for successful adoption and sustained implementation of an effective innovation (Ward et al., 2015). As such, the DCA is completed for one specific innovation (e.g., early literacy, PBIS). The administration is facilitated by a trained, external facilitator who guides the District Implementation Team through assessment of key implementation drivers derived from the implementation science research literature (Fixsen et al., 2005), such as leadership, competency, and organization. The resulting data provides the team with information to both develop an action plan for increasing capacity and monitor progress towards district capacity-building goals.

**District Systems Fidelity Inventory**

The District Systems Fidelity Inventory (DSFI; Center on Positive Behavioral Interventions and Supports 2020a) is a team-based self-assessment designed to provide an efficient index of implementation capacity and current status for districts exploring or actively implementing multi-tiered systems of support (MTSS) for social-emotional-behavioral efforts (e.g., PBIS). It is intended to serve as an update to and replacement of the PBIS Implementation Blueprint Self-Assessment, an informal capacity measure included in the PBIS Implementation Blueprint (Center on Positive Behavioral Interventions and Supports, 2015). As such, the DSFI guides teams through an assessment of implementation drivers aligned to the elements and functions shown in Figure 20.1: (a) leadership teaming, (b) stakeholder engagement, (c) funding and alignment, (d) policy, (e) workforce
capacity, (f) training, (g) coaching, (h) evaluation, and (i) local implementation demonstrations. The resulting data can be used to facilitate action planning to increase district capacity relative to the implementation drivers and also for progress monitoring of short- and long-term district improvement priorities identified to improve fidelity and outcomes. State leadership teams can use the State Systems Fidelity Inventory (Center on Positive Behavioral Interventions and Supports, 2019), a parallel measure for state efforts.

The DSFI is completed by a district leadership team established to lead the implementation of the district-wide multi-tiered system of support for social-emotional-behavioral domains. It is recommended to be completed prior to installation of an MTSS for social-emotional-behavioral efforts and then annually, thereafter, to progress monitor ongoing implementation. Once the DSFI is completed, the team can use the results, along with other district-level data (e.g., implementation phases, levels, and fidelity by building; building-level and district-level student outcomes; evidence of teacher practices), to organize short- and long-term action plans tailored to the district’s unique needs and context.

**Creating a Comprehensive Evaluation Plan**

District capacity is simply one aspect that a district, region, or state can measure to improve outcomes. The PBIS Evaluation Blueprint (Center on Positive Behavioral Interventions and Supports, 2020b) provides a structure for districts to develop, conduct, and use results from a tailored evaluation plan for a district initiative. With evaluation being a key implementation driver, the blueprint serves to increase district capacity for developing evaluation plans, using data to engage in continuous improvement cycles and disseminating evaluation reports. The Evaluation Blueprint proposes an evaluation model to assess initiative reach, process, capacity, fidelity, and outcomes. The blueprint stresses the use of evaluation to make systems more effective, efficient, equitable, and sustainable.

**Processes for Increasing Capacity**

District leadership teams can use the data from district-level measures (e.g., DCA, DSFI) to identify current strengths and areas for growth, which can be envisioned as short-term goals (e.g., 1 year) and long-term goals (e.g., 3 to 5 years). Identifying strengths and goals facilitates the design of an action plan that is both strategic in nature and comprehensive in scope. The purpose of the action plan is to gain and sustain commitment for implementation, organize and arrange for the supports necessary for large-scale implementation (i.e., training, coaching, evaluation), and monitor implementation progress across sites (George & Kincaid, 2008).

Although the quality and efficacy of the individual interventions or practices are important, the absence of an infrastructure or systems to support good implementation results in poor implementation and, ultimately, poor outcomes and rejection of the practice (Fixsen et al., 2011). To increase capacity across the organization, it is helpful to attend to the necessary functions of implementation (i.e., leadership teaming, stakeholder engagement, funding and alignment, policy, workforce capacity, training, coaching, evaluation, local implementation demonstrations), which can facilitate broad and sustained systems change (George & Kincaid, 2008; Horner et al., 2014).

**Setting the Course for District Change**

Engaging in successful PBIS implementation requires a systematic and collaborative approach. Researchers and practitioners have identified promising strategies for supporting PBIS implementation in schools and several key variables that lead to positive district change. Extensive
professional development is less effective and more likely to be abandoned without a clear vision with articulated and aligned goals derived from regular examination of data. As district leadership teams use this guidance to organize resources to facilitate successful implementation, more research is needed to empirically validate these strategies as a means to determine which are most likely to strengthen school implementation. Findings from research as well as data examined at the local level will provide practitioners guidance in how to successfully execute sustainable change at the district level.

**Recommendations for Practice**

School-wide PBIS is a widely implemented evidence-based, multi-tiered framework for systematically supporting the social-emotional-behavioral development of students through cohesive and preventative practices. Schools implementing PBIS at fidelity are shown to produce better outcomes for students (e.g., Bradshaw et al., 2010), and districts demonstrating key characteristics have been shown to produce a high proportion of schools implementing PBIS with fidelity. Systematic and collaborative planning are essential to organize the resources and supports necessary to build capacity for implementing and maintaining district change. This section provides guidance for practitioners that supports sustainable change at the district level.

**Leadership Teaming**

District leadership teams actively coordinate implementation efforts across schools and have the mission of increasing capacity for implementation (Center on Positive Behavioral Interventions and Supports, 2015). Horner et al. (2014) describe how districts can progress through the exploration stage without having a defined leadership team. In this early stage, leadership can be facilitated among strong advocates, subcontracted specialists, in-district collaboratives, as well as other supporters. However, because of their vital role in scaling up, district leadership teams are the most important element to establish prior to moving into the installation phase and initiating implementation (George & Kincaid, 2008; Horner et al., 2014). At this stage, teams must measure readiness for implementation and use the information from the exploration stage to help the organization assess readiness for change and identify the initial systems, practices, and data decisions that will be necessary to implement to the degree that improved student outcomes are evident (Lewis et al., 2016). Establishing a leadership team with roles and decision-making authority aids sustainability and is a necessary precursor for the political and fiscal support necessary for large-scale expansion (Horner et al., 2014).

For effective implementation and expansion, district leadership team members should be collectively committed to the science and framework of PBIS, have a plan for future expansion and sustainability, possess the authority to make key decisions (e.g., budget, implementation, policy, data systems), and have the capacity to allocate resources to implementation and expansion efforts (Center on Positive Behavioral Interventions and Supports, 2015; George & Kincaid, 2008). Because the district leadership team oversees implementation across all district sites, the team should have representation from a wide range of stakeholders including, but not limited to, individuals having (a) capacity to influence district-level professional development, (b) knowledge about the operations of the district across grade levels and programs, (c) access to district-level executive leadership, (d) responsibility for coordinating community and family engagement, (e) special education administrative authority, (f) administrative authority with social-emotional-behavioral support providers (e.g., counselors, social workers, school psychologists), (g) behavioral science expertise across the full continuum of behavior support (Tiers 1, 2, 3), and (h) representing the local community (e.g., community center leader, school board member; Center on Positive Behavioral
Interventions and Supports, 2020a). One suitable process for ensuring that the appropriate personnel and stakeholders have been identified to establish and lead implementation is to create a roster identifying team members and their position/title and compare it to the range of stakeholders previously described (a-h above).

When planning for district-wide expansion, one essential task of the district leadership team is to identify a district-level employee who can both facilitate the district-level team and serve as the PBIS district coordinator (George & Kincaid, 2008). District coordinators play a pivotal role in organizing and supervising professional development, implementation, and evaluation efforts within the district and while planning for scaling (Lewis et al., 2016). Effective coordinators possess adaptive skills ranging from technical (i.e., training and coaching) to management (e.g., hiring personnel, planning distributed training, disseminating evaluation data; Horner et al., 2014) and possess institutional knowledge with established relationships with school administrators (George et al., 2018). George and Kincaid (2008) note that because the amount of time allocated for a PBIS district coordinator correlates with the number of trained schools, as the quantity of PBIS implementation activities and the number of implementing schools increases, so, too, should the time equivalence of the coordinator.

**Stakeholder Engagement**

As district leadership teams plan for expansion, they should reflect on the visibility of their current and future work. With strategic communication, district leadership teams can increase awareness of implementation efforts which can foster increased levels of stakeholder engagement and also safeguard against scaling efforts being sidelined by competing initiatives.

By engaging stakeholders (internal and external), districts are better able to improve school climate; provide timely supports and services for families; and enhance student success at home and in the community through shared values (Epstein et al., 2009). Additionally, making an effort to engage all stakeholders benefits the district leadership team by enabling implementation in ways that are relevant to the culture, context, and values of the community. By considering stakeholder perspectives, district leadership teams obtain a more robust and clearer understanding of the experiences and values of the very consumers for which their systems, policies, practices, and larger implementation processes are intended.

Districts can bring about meaningful stakeholder engagement through strategic efforts to actively involve stakeholders in goal setting; disseminate information, data, and accomplishments to stakeholders; and interact with stakeholders at implementation events and activities (Center on Positive Behavioral Interventions and Supports, 2020a). One approach for organizing stakeholder engagement is developing and maintaining a stakeholder engagement plan. Such plans help district leadership teams establish systems for open, ongoing two-way communication. The purpose of a stakeholder engagement plan is to guide the district leadership team in the development and execution of action steps that engage multiple and diverse perspectives. Plans are comprehensive and designed to include: (a) an objective statement aligned to a measure of fidelity (e.g., DSFI, Tiered Fidelity Inventory, Self-Assessment Survey), (b) a communication/engagement goal the district seeks to achieve to attain the objective which is aligned to the scoring criteria of the fidelity measure, (c) action steps outlining all items necessary for reaching the goal, (d) progress monitoring of action steps, (e) persons responsible, (f) target audience, (g) type of information to be shared (data, accomplishments, implementation progress), (h) frequency or timeline for engagement, and (i) method of communication (print, electronic, verbal; University of Missouri Center for Schoolwide Positive Behavior Support, 2020).

There are many ways to facilitate information dissemination and district leadership teams should establish multiple systems for communicating information, data, and accomplishments on a regular basis and review them annually for fidelity. Through means such as newsletters, presentations to
district and community leaders, district and school websites, recognition of exemplar schools, and pieces in the local media, districts can build the visibility necessary to scale and sustain PBIS. Such efforts not only increase interest in expansion, but they also advance the vision that PBIS implementation is connected to the district’s larger and related improvement goals (e.g., reduce behavioral challenges, enhance academic–related behaviors, increase time in instruction) and is more than a momentary fascination (George & Kincaid, 2008).

Beyond espousing a vision, it is important for district leaders to endorse the daily work of implementation on a regular basis. By actively participating in PBIS events and activities (e.g., PBIS conferences, annual PBIS events, implementation site visits, acknowledgment of district/school progress), organizational leaders such as superintendents, board of education members, and department coordinators visibly affirm the PBIS goals and show public support for implementation efforts. Additionally, by participating in PBIS events and activities, district leaders are able to engage stakeholders and solicit feedback on implementation progress and outcomes (University of Missouri Center for Schoolwide Positive Behavior Support, 2020).

### Funding and Alignment

A key aspect of district leadership is fiscal planning. During the early phases of an implementation initiative, districts may take advantage of external funding (e.g., grants) to support their PBIS initiatives. Although external funding sources can help stimulate a district’s efforts and incentivize engagement, they are short-term in nature and not reliable for developing the infrastructure necessary for long-term implementation and systems change (George & Kincaid, 2008). Short-term funds can create barriers to increasing district capacity as a result of implementation efforts catering to the funding source rather than the design of a larger district infrastructure to support sustainability (George & Kincaid, 2008). To sustain and expand efforts within the district, a primary objective of the district leadership team should be developing a district budget plan with recurring funding and regularly allocated line items (i.e., prioritized funding) to support implementation and continuing support of the PBIS framework.

To enhance capacity to achieve full and sustainable implementation, it is important that the district leadership team inventory and assess what initiatives, programs, and practices are currently being promoted and implemented across the district. It is also important to evaluate the district’s current reality and valued outcomes (i.e., goals) to identify the initiatives, programs, and practices that will move the district forward, those which are disconnected from the larger district vision, and how to best align efforts across the district to maximize resource and workforce potential. To this end, district leadership teams should engage in collaboration and coordinate across initiatives, programs, and practices and carefully plan for expansion (George & Kincaid, 2008).

One roadblock to expansion is diluted implementation capacity as a result of juggling multiple initiatives. Districts often have numerous foci which schools and educators are expected to attend to and implement. However, spreading attention across numerous objectives weakens the capacity to implement with integrity and fidelity (Sugai & Horner, 2006). For this reason, it is vitally important for the district to align initiatives. One effective way to achieve greater levels of alignment is to link the PBIS implementation action plan with the larger district improvement (i.e., strategic) plan and related goals. By clearly articulating within the action plan how PBIS activities relate to and address larger, relative district goals, the district leadership team can reduce redundancies, inefficiencies, and conflicting messages (Lewis et al., 2016).

Additionally, the Center on Positive Behavioral Interventions and Supports (2017) has produced a *Technical Guide for Alignment of Initiatives, Programs, and Practices in School Districts*, which teams can use to create an inventory of what is being done and then analyze the information to identify and readjust
priorities. By conducting an annual audit of programming, districts can better maintain alignment and integration, problem-solve proactively, and ensure the fit of new initiatives, programs, and practices.

**Policy, Systems, and Workforce Support**

As districts scale implementation across schools, identifying social-emotional-behavioral health as one of the district’s key goals can unify sites and personnel with a common purpose. A vision statement that clearly articulates the significance of positive school climate and student social-emotional-behavioral health in relation to student achievement and the reasoning for district-wide PBIS implementation serves to provide direction for all stakeholders and support for the work.

The district leadership team has the ability to influence policy development and, therefore, the responsibility to make recommendations for policies and procedures that support students’ social-emotional-behavioral needs through the use of proactive, instructional, and ethical practices and which support the implementation of PBIS (Center on Positive Behavioral Interventions and Supports, 2020b; University of Missouri Center for Schoolwide Positive Behavior Support, 2020). As well, policies and procedures should encourage and promote equitable outcomes for all students by emphasizing the consistent use of evidence-based strategies for behavior support across student populations and demographics, including students with disabilities.

Relatedly, guidance for disciplinary decisions should be written and distributed to key stakeholders (internal and external) on a regular basis (Center on Positive Behavioral Interventions and Supports, 2020a). By annually auditing discipline policies and systems (e.g., code of conduct, student handbooks, staff handbooks), the district leadership team can refine discipline systems such that they enhance both social-emotional-behavioral and academic outcomes as well as fidelity of implementation.

Guidance on policy and discipline are constructive ways to better support the district’s workforce (i.e., faculty and staff) with PBIS implementation. To achieve durable, large-scale implementation of PBIS, districts should also consider how their recruitment, hiring, and evaluation practices support the capacity of their workforce and support sustainability. By explicitly naming PBIS and embedding implementation activities (e.g., training and coaching) with dedicated time into job descriptions, districts are able to recruit and retain personnel with the knowledge, skill, and experience implementing PBIS. Likewise, by providing guidance on hiring criteria and selection for district/school administrators, relevant coaches, teachers, and other staff, district leadership teams can positively influence the selection of personnel who will advance the work. Moreover, district leadership teams can embed PBIS implementation into performance evaluations of administrators, teachers, and related instructional/support personnel to assess knowledge and skills related to PBIS systems implementation. In doing so, districts establish systems and structures for meaningful performance feedback and, in turn, support and retain a high-quality workforce.

**Professional Development: Training and Coaching**

District leadership teams can establish an effective professional development system by following a multi-step process. First, teams can assess their schools’ current levels of PBIS implementation across the district to better understand the depth and breadth of implementation. Utilizing data from established fidelity measures can help district leadership teams better understand the number of sites implementing and at what tier. Second, teams can then self-assess their current professional development capacity. By considering individuals based on their expertise and role rather than their unique position or title, districts can effectively and efficiently establish a cadre of trainers and coaches. For example, schools at the installation or initial implementation stage can be trained by the district PBIS coordinator, district PBIS coaches, or even PBIS team leaders from fully implementing schools. As well, roles such as school counselor, school psychologist, and behavior consultant can be leveraged and used to fulfill PBIS coaching functions (Lewis et al., 2016).
To make adequate determinations about the needs of training and coaching personnel, districts can use the PBIS Trainer/Coach Assessment included in the PBIS Professional Development Blueprint (Lewis et al., 2016) to measure the current level of knowledge and skills of trainers and coaches across all tiers of PBIS (George & Kincaid, 2008; Lewis et al., 2016). In addition to helping district leadership teams identify current levels of in-district behavioral expertise, the results can facilitate the identification of the skill sets current trainers and coaches will need for sustaining implementation, guide the allocation of professional development provided to trainers and coaches, and identify the personnel needed to meet the district’s needs (George & Kincaid, 2008; Lewis et al., 2016). When considering the necessary personnel to expand and sustain implementation, district leadership teams can identify the roles and functions required for establishing implementation and sustaining the initiative as a priority by looking across service areas. In doing so, districts can identify district-level personnel who may serve as coaches to provide technical assistance to school-based teams and assist in the regular monitoring of school progress (George & Kincaid, 2008). Local experts such as school psychologists, social workers, and special educators with higher-level behavioral knowledge can aid full implementation at the advanced tiers and support training and coordination needs (Horner et al., 2014).

Once capacity for professional development is assessed and established, districts can use schools’ fidelity data to better understand professional development needs across campuses and the district. Professional development needs can be organized into three categories: (a) assistance for sites at the exploration stage with overviews and readiness, (b) ongoing training along all three tiers of the PBIS framework differentiated by team readiness, and (c) readily available technical assistance and coaching. To facilitate this work, districts need the capacity to deliver training that are targeted on pivotal skills, taught with opportunities to see and hear examples, and include dedicated time during and after to apply concepts to the school’s context with coaching support (Lewis et al., 2016).

District trainers and coaches, in conjunction with the District PBIS Coordinator, can use school-level self-assessment data to design a professional development action plan to guide school-level teams through the phases of implementation across all tiers of PBIS. The PBIS Professional Development Blueprint (Lewis et al., 2016) provides guiding questions, tools and supports, activities, and desired outcomes to assist district leadership teams with the development of a comprehensive professional development plan. Simultaneously, it is important for the district also to establish a professional development action plan for district trainers and coaches to enhance their expertise and skills. One straightforward, manageable way to support trainers and coaches is by hosting regular (monthly, bimonthly) meetings consisting of data sharing, skill-building activities, success stories, problem-solving, and networking (George et al., 2018; George & Kincaid, 2008).

**Evaluation**

Scaling, expanding, and increasing capacity for broad-scale implementation requires the evaluation of fidelity of implementation and impact on student outcomes to be more organized, coordinated and disseminated (Horner et al., 2014). Districts can increase their capacity to support school practices by developing an evaluation infrastructure (i.e., adequate evaluation measures, data collection systems, cadres with evaluation expertise) so that school and district implementers can regularly assess whether systems and practices are being implemented with fidelity and if that implementation is benefitting students (Center on Positive Behavioral Interventions and Supports, 2020b).

Using the PBIS Evaluation Blueprint (Center on Positive Behavioral Interventions and Supports, 2020b), district teams can establish comprehensive evaluation plans that measure (a) reach (“Who is participating?”), (b) process (“What is happening with the initiative?”), (c) capacity (“What is the capacity of the organization to implement and sustain?”), (d) fidelity (“Are we implementing as intended?”), and (e) outcomes (“Is the initiative achieving valued outcomes?”). A comprehensive approach to evaluation with data from various instruments aids teams in refining and enhancing the
implementation process. By having data systems in place to collect common data which facilitate continuous decision making, districts are better positioned to assess current levels of implementation, determine strengths and weaknesses of implementation activities, plan for ongoing professional development and coaching to support staff, and refine resource allocation and policies (Childs et al., 2016; McIntosh et al., 2017; Mercer et al., 2017).

**Local Implementation Demonstrations**

To realize full implementation across all buildings, district leadership teams should plan for local implementation demonstrations and consider how to best use pilot and model schools as part of the strategic plan for scaling up (Center on Positive Behavioral Interventions and Supports, 2020a; George & Kincaid, 2008). Model demonstration sites are recognized as being exemplars of PBIS implementation with fidelity and typically have annual data indicating sustained high levels of fidelity of implementation and visible activities, data (e.g., success in improving student outcomes), and products to serve as local examples of process and outcomes (George & Kincaid, 2008). As districts work to scale up implementation, it is imperative teams plan for a range of demonstrations and models, with sites across tiers and levels (e.g., early childhood, elementary, middle, high; Center on Positive Behavioral Interventions and Supports, 2020b).

The achievements of model demonstration sites can strengthen and promote the reasoning for continued district expansion and ultimately become a training resource as implementation expands to new schools within the district or for teams struggling with implementation (Sugai & Horner, 2006). Additionally, establishing model or exemplar demonstrations can help facilitate support among executive-level leadership within the organization (McIntosh et al., 2016). As the number of demonstration schools increases and exemplar sites document feasibility and beneficial student outcomes, political support for implementation expansion shifts and results in an increased willingness to invest in the organizational systems needed for broad-scale implementation (e.g., training, coaching, evaluating, intervening practices; Horner et al., 2014) at the district level.

**Recommendations for Research**

In general, research has shown that teaming is an essential component to successful outcomes and has pointed to the importance of collaboration, integration, planning and data-based problem-solving (George et al., 2018; Horner et al., 2018; McIntosh et al., 2018). However, little is known regarding the impact of the engagement of diverse stakeholders in relation to actual outcomes achieved. What function of district team members will likely produce changes in student outcomes? Randomized control trials of PBIS have demonstrated significant effects across a range of student outcomes (e.g., Horner et al., 2010). However, for schools to sustain high fidelity implementation of the full PBIS framework, they need continuous support from their district. Further examination of the leadership team component such as individual team functions, procedures, or overall structures related to improved student outcomes at the district level is needed. This analysis may be of value for establishing more effective leadership teaming as well as the identification of specific team activities that may result in better student outcomes.

Over a decade of research on the critical role that the fidelity of PBIS has on student outcomes is noteworthy. Research should continue to define and better clarify the relation between district leadership teaming practices and student outcomes. District interviews conducted by George et al. (2018) were the first to reveal the distinct contributions of the district coordinator and the integrated teaming structure. Although relationships and enthusiasm are difficult to measure, further research on these critical attributes in relation to student outcomes may assist districts when hiring a coordinator, individuals serving a coaching capacity, or even administrators in leadership roles.
Further, McIntosh et al. (2013) identified factors related to the sustainability of school-wide PBIS implementation, including two district-level factors, district priority and capacity building. Expansion of this finding examined the specific coaching activities most related to sustained implementation (Bastable et al., 2020). Future research could identify how some of these activities and attributes also interact with contextual factors (e.g., demographics, resources) and district leadership teaming actions that improve student outcomes. For example, is there a difference in key variables needed across the phases of implementation at the district level?

Implementing PBIS requires resource allocation that may include funding for personnel, database systems, training, coaching, and other activities. Further examination of how teams can most effectively allocate resources is needed to guide district leadership teams in planning their implementation activities. Although some researchers have assessed the cost of school-wide PBIS at the school, district and state levels (Bradshaw et al., in press; Swain-Bradway et al., 2017), more research is needed to fully examine the actual costs incurred on these specific budgets. Investigating the cost savings of PBIS across both a range of schools (e.g., elementary, middle, high) and geographic area (e.g., rural, suburban, urban) as well as the personnel critical to an effective infrastructure can assist district leadership teams in evidence-based decision making and appropriate allocation of resources (e.g., hiring coaches, identifying training activities, aligning initiatives, preventing attrition). This information can also assist in determining the needs of the workforce capacity, delivering essential training, and integrating performance evaluation aligned with improved outcomes (e.g., school climate, fidelity, consumer satisfaction). Research is also needed on the impact of existing district policies, such as the delivery of intensive interventions by specialized personnel or the engagement of exclusionary practices that may hinder student outcomes and impact higher costs of implementation. Further evidence demonstrating a return on investment may assist teams in leveraging district-wide visibility and political support and thus, directly impact funding.

Conclusion

Districts invest in systems to support, sustain, and scale implementation of the PBIS framework throughout their schools. Following the PBIS Implementation Blueprint (Center on Positive Behavioral Interventions and Supports, 2015), a representative leadership team engages in executive team functions (stakeholder engagement, funding and alignment, policy, and workforce capacity), develops and carries out critical implementation functions (training, coaching, and evaluation), and celebrates local implementation demonstrations. Much like school teams, district teams complete measures to monitor systems fidelity (e.g., DCA, DSFI), design and conduct a comprehensive evaluation plan, and develop and implement an action plan to increase capacity. Thus, districts play a critical role in developing systems to support school-level implementation and ultimately improving outcomes for educators and students. Although current evidence supports a variety of implications for practice, described in detail in this chapter, further research is necessary to uncover and understand relations between key district features (e.g., teaming structures and functions), implementation fidelity, and student outcomes.

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