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### Bridging the Research-to-Practice Gap Through Effective Professional Development for Teachers Working with Students with Emotional and Behavioral Disorders

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### Bridging the Research-to-Practice Gap Through Effective Professional Development for Teachers Working With Students With Emotional and Behavioral Disorders

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#### **Abstract**

Students with emotional and behavioral disorders (EBD) experience a variety of externalizing and internalizing behavior problems, gaps in academic achievement, and increased rates of dropping out of school. Thus, it is essential that students with EBD receive evidence-based academic and behavioral supports from skilled and knowledgeable teachers to improve student outcomes. Unfortunately, teachers typically receive limited professional development in classroom management practices and other supports targeting the unique needs of students with EBD. In this manuscript, we describe (a) challenges in the field related to supporting students with EBD, (b) current practices in professional development, (c) a multitiered-system-of-support framework for organizing and providing professional development, and (d) the need for more research on efficient and effective professional-development supports for teachers of students with EBD.

#### **Keywords**

emotional and behavioral disorders, professional development, teacher preparation, capacity building, implementation, sustainability

The contemporary education landscape reflects an array of academic and behavioral challenges for classroom teachers in general, and teachers of students identified with emotional and behavioral disorders (EBD) in particular. Students identified with EBD struggle with behavioral challenges and poor academic performance in math and reading, and their performance does not improve over time (Gage, Adamson, MacSuga-Gage, & Lewis, 2017; Lane, Barton-Arwood, Nelson, & Wehby, 2008; Siperstein, Wiley, & Forness, 2011). Thus, it is essential that students with EBD receive instruction from effective teachers who have the knowledge and skills to implement evidence-based academic and behavioral strategies to improve students' outcomes.

Nearly 30 years ago, a collection of scholars and advocates for students with EBD formed the Peacock Hill Working Group (1991). This group spearheaded advocacy efforts for students with EBD by making recommendations for improving practice, policy, research, and professional preparation. The group noted that "little agreement can be found about appropriate preparation of teachers and strategies for retaining them" (p. 309). To improve teacher

preparation and retention in the field of EBD, the group called for (a) establishing demonstration programs that showcase effective practices and (b) improving and expanding in-service professional development (PD) for teachers to focus on cross-agency collaboration, best classroom practices, and family-based interventions.

Inspired by the advocacy of the Peacock Hill Working Group, the Creekbend Behavioral Consortium brought a carefully selected group of scholars together to focus on key issues impacting the field of EBD, which are described in this special issue. Among those issues is the importance of creating and maintaining an effective workforce to support students with or at-risk for EBD. In this manuscript, we describe (a) challenges in the field related to supporting

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students with EBD, (b) current practices in PD impacting both special and general educators, (c) a multitiered-system-of-support framework for organizing and providing PD, and (d) the need for more research on efficient and effective PD supports for teachers of students with EBD.

# The Research-to-Practice Gap: A Fundamental Challenge in Supporting Students With EBD

According to the 38th Annual Report to Congress on the Implementation of the Individuals With Disabilities Education Act (IDEA), almost half of the population of students identified with emotional disturbance (ED)—the primary IDEA disability identification of students with EBD—participated 80% or more of the day in the regular education classroom (U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, 2016). Furthermore, national data indicate that fewer than 1% of students are served under the ED category; however, prevalence estimates suggest that as many as 12% of students experience a moderate-to-severe psychiatric disorder warranting intervention at any one time (Forness, Freeman, Paparella, Kauffman, & Walker, 2012; Forness, Kim, & Walker, 2012). Thus, approximately 11% of students may need services but are not receiving them within the ED category at any point in time. As a result, a significant number of students with or at-risk for EBD are likely present in all schools and classrooms, and all educators must be ready to support students with or at-risk for EBD (Oliver & Reschly, 2010).

Unfortunately, research points to insufficient numbers of teachers with adequate training to competently address the needs of students with EBD (Albrecht, Johns, Mounsteven, & Olorunda, 2009). Even more concerning, practicing special education teachers of students with EBD are less experienced, less credentialed, and twice as likely to been certified via alternate certification programs than other educators (Billingsley, Fall, & Williams, 2006; Henderson, Klein, Gonzalez, & Bradley, 2005). Persistent teacher shortages and high teacher turnover, particularly in special education, push school districts to embrace quick fixes such as hiring teachers who are emergency certified (Boe, 2014; Katsiyannis, Zhang, & Conroy, 2003; McLeskey & Billingsley, 2008), which leaves the task of supporting the most challenging students to educators who are the least prepared (Sutherland, Denny, & Gunter, 2005).

Although these structural challenges (e.g., critical teacher shortages, varying initial teacher preparation and certification requirements) may continue to impact supports for students with EBD, research suggests that teachers' practices, rather than their professional backgrounds, are the best predictors of outcomes for students. For example,

Gage, Adamson, and colleagues (2017) revealed the academic achievement of students with EBD was not impacted by their teachers' education, certification, or years of experience. Instead, researchers have documented that teachers' implementation of effective practices (e.g., time spent instructing, type of instruction) impacted the academic growth of traditionally disadvantaged students (Desimone & Long, 2010). Therefore, to improve outcomes of students with or at-risk for EBD, it is critical to (a) identify effective and evidence-based practices and (b) examine why these practices are not being implemented with sufficient fidelity (research-to-practice gap).

To improve the outcomes of students with or at-risk for EBD, all teachers need to know and implement a range of evidence-based practices to meet students' diverse academic and behavioral needs (e.g., Lane, Jolivette, Conroy, Nelson, & Benner, 2011). After reviewing the literature, Lewis, Hudson, Richter, and Johnson (2004) identified self-management, social skills instruction, engaging academic instruction with high rates of opportunities to respond, function-based behavior supports, specific praise and other reinforcement, and school-wide positive behavior support among the practices that are evidence-based and critical to support students with EBD. More recently, researchers recommended a set of high-leverage practices to use in the classroom setting when supporting students' social, emotional, and behavioral learning (McLeskey, Maheady, Billingsley, Brownell, & Lewis, 2018). These practices were identified based on research supporting positive effects for students exhibiting behavior challenges, and include explicit strategies for building and fostering positive student-teacher relationships; establishing clear expectations, routines, and procedures in the classroom; providing specific positive and constructive feedback, as well as high rates of opportunities to respond to maintain student active engagement; teaching social skills; and conducting functional behavior assessments to develop individualized behavior support plans (McLeskey et al., 2018). In short, researchers have identified critical practices that will lead to better outcomes for students with EBD.

Unfortunately, there continues to be a disconnect between what is known about evidence-based and high-leverage practices and actual implementation of these practices in classrooms (Cook & Odom, 2013). Educators consistently describe that they are not prepared to implement evidence-based and high-leverage practices (Gable, Tonelson, Sheth, Wilson, & Park, 2012; Stormont, Reinke, & Herman, 2011), and researchers consistently document that teachers are not implementing these practices—teachers spend too little time directly teaching, provide low rates of opportunities to respond, and give more negative than positive feedback (e.g., Gage, Scott, Hirn, & MacSuga-Gage, 2017; Hirn & Scott, 2014).

In the absence of effective practices being implemented in the classroom, both teachers and students with EBD will continue to struggle and experience unsuccessful outcomes. Although causes of the research-to-practice gap are likely multiple and complex, inadequate preservice training and limited opportunities for meaningful PD contribute to the research-to-practice gap (Greenwood & Abbott, 2001; McLeskey & Billingsley, 2008). For example, nine out of 10 U.S. teachers report only participating in one-size-fitsall PD opportunities, such as conferences and workshops, and more than half of teachers report the training received did not target crucial areas such as teaching students with special needs or classroom management (Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos, 2009). For teachers to improve their implementation of evidence-based and high-leverage practices, it is critical that they receive initial training and ongoing PD support that is tied to both improved implementation and student outcomes (e.g., Lane et al., 2011). Next, we turn to defining and describing current PD approaches that may be applied to support teachers working with students with or at-risk for EBD.

## **Current Practices in Professional Development**

Darling-Hammond, Hyler, and Gardner (2017) "define effective PD as structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes" (p. 2). Researchers suggest that effective PD (a) is intensive and ongoing, (b) focuses on content knowledge and student learning, (c) aligns with other learning activities and school improvement goals, (d) provides opportunities for active learning on the part of teachers, (e) develops strong working relationships among teachers, (f) is job-embedded, and (g) includes coaching (i.e., follow-up technical assistance) and performance feedback (Darling-Hammond et al., 2009; Darling-Hammond et al., 2017; Desimone, 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007).

In pursuing effective PD, administrators are often forced to balance best practices in PD with the realities of budgeting and time constraints. We describe common PD activities—conference attendance and workshops, full-day/half-day in-service trainings, online modules, professional learning communities (PLCs), coaching, and self-management—in this section, with a brief discussion of strengths and weaknesses of each approach. We encourage readers to keep in mind that effective PD almost always necessitates more than a single activity to encompass all of the above-mentioned core features of effective PD necessary for skill acquisition and translation of skills into practice.

#### Conference Attendance and Workshops

Conferences and workshops are short-duration gatherings of education professionals to discuss and implement skills development and knowledge acquisition. Workshops and conferences often depend on a cascading model of knowledge distribution, where a small group of educators are taught a new method and then asked to pass on what was learned to others in their professional community. Occasional, one-shot workshops do not provide the consistent, ongoing support teachers need to be able to translate theory into practice (Darling-Hammond et al., 2009). Attendees do not always implement the techniques presented in workshops, or they wait too long to attempt implementation, leading to low transfer of learning or poor-quality implementation with no effect on student achievement (Dichaba & Mokhele, 2012; Ono & Ferreira, 2010; Yoon et al., 2007).

#### **In-Service Training**

In-service training, which may be delivered as a brief (e.g., 20–60 min) or extended (e.g., full- or half-day) event, is designed to bring PD to educators in an inperson format. Although traditional "sit-and-get" inservice training consists of delivering content via lecture, more recent in-service approaches have incorporated several core features of effective PD, including PD that is content-focused, job-embedded, collaborative, and high in engagement (e.g., Darling-Hammond et al., 2017). Effectively designed in-service training includes describing the skill or content, sharing a rationale for the importance of the skill, modeling how it looks in a classroom, providing opportunities to practice, and receiving feedback in a training context (e.g., Simonsen, Myers, & DeLuca, 2010). Furthermore, inservice training should be paired with follow-up and other methods of support (Marquez et al., 2016); otherwise, it suffers from same challenges (e.g., low transfer of learning, poor implementation) as conferences and workshops. A trainer can introduce critical skills to teachers during an in-service session, but unless teachers are further supported to implement the skills with additional training sessions, coaching/mentoring, or self-management procedures, it will likely not be sufficient to lead to quality implementation and sustainability of the trained skills.

#### Online Modules and Instruction

Online modules offer unlimited reach, with various topics available to any teacher with online access, which may be particularly valuable for teachers who live in remote or rural areas. If designed and implemented IIO Behavioral Disorders 44(2)

properly, online modules can increase knowledge, the capacity to apply evidence-based practices in the classroom, and the development of learning communities among teachers across the country (Erickson, Noonan, & McCall, 2012). Access to online training modules does not guarantee full understanding of the techniques taught, or their effective implementation. For example, Jimenez, Mims, and Baker (2016) evaluated the effects of online training modules on in-service teachers' collection and use of progress monitoring data. Although the teachers were able to acquire information about collecting instructional progress monitoring data, the online modules alone were not sufficient to support the teachers in applying the data gathering techniques with their own students. Therefore, training in online modules should be supplemented with some form of ongoing coaching and performance feedback, whether from coaching, peer, or self-managed supports.

#### **Professional Learning Communities**

PLCs are voluntary gatherings of teachers that can (a) develop informally or formally around a particular project, interest, or shared goal (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006), and (b) provide for a continuous inquiry process with the purpose of bettering student learning (DuFour & DuFour, 2015). Participants in these groups benefit from discussion pertaining to a common goal or problem, often a curriculum-specific problem in a district, school, or grade level. Collaborative activities such as reading, discussion, and reflections on videotaped lessons or classroom observations are examples of activities that generate reflective dialogue among the members (Tam, 2015). Participation in PLCs have been shown to increase collaboration among educators, change teacher practice, improve teacher knowledge and efficacy, and improve student achievement for students who struggle most in classrooms (Lomos, Hofman, & Bosker, 2011; McLaughlin & Talbert, 2006; Vescio, Ross, & Adams, 2008). Even more important for students with disabilities, research shows that special education teachers can play key roles in the effectiveness of PLCs, as PLCs offer great opportunities for special and general educators to work together, learn from each other, and ultimately improve their classroom practice (Blanton & Perez, 2011).

Successfully constructing PLCs requires balancing the group's objectives with the individual professional objectives and needs of each participant (Little, 2002), members' engagement in the community (Hardman, 2011), and leadership (Hairon, Goh, & Chua, 2015). Common challenges for teachers trying to construct a well-developed PLC include group tensions, reluctance to speak openly for fear of personal or professional backlash, a lack of a shared vision for the group's purpose and operation, and lack of ownership (Dooner, Mandzuk, & Clifton, 2008; Schaap & deBruijn, 2018).

#### Coaching

Coaching comprises a set of functions that are delivered across time, including (a) providing prompts, guidance, encouragement, and reminders about practices (antecedent strategies); (b) observing, collecting, and using data to monitor teachers' implementation of classroom practices; and (c) providing data-based feedback on teachers' implementation to problem solve, to overcome implementation challenges, and to celebrate successes (c.f. Freeman, Sugai, Simonsen, & Everett, 2017). Thus, coaching functions can be performed by a variety of individuals (outside experts, school leaders, mentors, peers, or even teachers themselves) and delivered in a variety of formats (large group, small group, or individual) based on contextual factors (type of skill, content focus, or teachers' needs; Freeman, Simonsen, et al., 2017).

When implemented as a component of a PD program, coaching should be done in a way that is individualized, intensive, sustained, context-specific, and focused on specific skills (Kraft, Blazar, & Hogan, 2018). Thus, coaching embodies many of the core features of effective PD. In general, this type of intensive, individualized coaching is associated with improvements in teachers' instructional practices and student achievement, especially when coaching is (a) content-specific and (b) paired with training (e.g., in-service training, online modules), instructional resources, or both (Kraft et al., 2018; Kretlow & Bartholomew, 2010). Coaching can be delivered in person (e.g., Reinke, Stormont, Herman, & Newcomer, 2014) or remotely (e.g., "My Teaching Partner"; Pianta, Mashburn, Downer, Hamre, & Justice, 2008), as both approaches appear effective (Kraft et al., 2018). For example, 52 elementaryschool teachers participated in six workshops across the school year and weekly individual coaching sessions to implement proactive classroom-management practices such as increased rates of praise and precorrections, and decreased use of reprimands (Reinke et al., 2014). Coaching sessions focused on reviewing the content delivered during the workshops, setting weekly goals, providing feedback based on data collected via direct observation by the coach, modeling and role-playing the practice as needed, and supporting action planning based on feedback. Results indicated that teachers who received more performance feedback had significantly higher levels of implementation that they sustained for a longer time compared with teachers who received less performance feedback.

A good example of how online instruction can be augmented with online/remote coaching is offered by My Teaching Partner, a coaching program that has demonstrated effectiveness in improving teacher–student interactions and student outcomes in pre-K, elementary, and secondary settings (Gregory, Allen, Mikami, Hafen, & Pianta, 2014; Hamre, Pianta, Mashburn, & Downer, 2012; Mikami, Gregory, Allen, Pianta, & Lun, 2011; Pianta et al., 2008). In these programs, teachers participate in 2-week coaching cycles delivered about six to nine times per year. Each coaching cycle consists of a series of exchanges

between the teacher and the coach, where video recordings are submitted by the teachers and feedback with illustrative examples is provided by the coach (Pianta et al., 2008).

#### Self-Management Supports

In addition to expert- (e.g., conferences, workshops, in-service trainings, online modules), coach-, and peer-delivered supports, an emerging literature base suggests that teachers may be able to support themselves in improving their practice. Self-management is defined as an individual implementing antecedent- (e.g., rearranging the environment, self-delivered prompts), behavior- (e.g., self-monitoring, self-instruction), and consequence-focused (e.g., selfreinforcement, self-correction) strategies to support their own behavior change (e.g., Skinner, 1953). Researchers have shown that self-management approaches can support and enhance teachers' implementation of instructional practices (e.g., Allinder, Bolling, Oats, & Gagnon, 2000; Keller, Brady, & Taylor, 2005; Sutherland & Wehby, 2001). More recently, Simonsen et al. (2017) demonstrated that selfmanagement can be an efficient way to increase teachers' use of specific classroom behavior-support practices (e.g., specific praise) in a "Targeted Professional Development" approach that combines self-management with brief (20 min) training and weekly email prompts.

## Summary of Professional Development Approaches

In summary, there is no quick, one-size-fits all, and low-cost method to effectively conduct PD. Overall, research indicates that although one-shot PD activities can have some positive effect by simply adding to a teacher's knowledge base, ongoing and intensive PD is necessary to positively impact student performance. Specifically, we recommend that explicit training in evidence-based practices be paired with intensive and ongoing PD supports (i.e., coaching and performance feedback), which may be delivered in person or remotely by coaches, peers, or self-managed supports, to improve teachers' implementation of evidence-based practices, and ultimately, the outcomes for students with EBD (see Figure 1). Thus, it is critical that school leaders develop a framework for supporting teachers' implementation of high-leverage classroom practices that incorporates varied PD activities grounded in core features of effective PD.

#### A Framework for Supporting Teachers' Implementation of Classroom Practices: Multitiered Systems of Support

Based on growing research support pointing to the effectiveness of coaching as a PD practice positively affecting

both teacher practice and student achievement (Kraft et al., 2018), and the use of multitiered systems of support (MTSS) as an overreaching framework for the implementation of evidence-based practices in schools, researchers have recently suggested a blending of the two. This results in the use of coaching within MTSS as a feasible approach for supporting educators' implementation of evidence-based classroom practices (Freeman, Simonsen et al., 2017; Simonsen et al., 2014), including those for addressing the needs of students with EBD. Based on a public health model (Caplan, 1964) and traditionally applied to students, an MTSS framework is used to organize a continuum of evidence-based practices that are (a) universal (Tier 1) and delivered to all individuals, (b) targeted (Tier 2) and delivered to groups of individuals with an identified need, and (c) intensive and individualized (Tier 3) and provided to individuals with the greatest need. To use time and financial resources in a strategic manner and incorporate core features of successful PD such as ongoing and continuous coaching, school leaders may consider using coaching within an MTSS framework to organize PD opportunities (see Figure 2).

As Freeman, Simonsen et al. (2017) described, an effective system for supporting teachers' implementation of classroom practices includes (a) explicit training (e.g., inservice, online) that presents content in a model-lead-test format, and (b) coaching and performance feedback, which may be delivered in by a coach or mentor, peer (e.g., PLC), or teachers themselves (i.e., self-management). They described that PD supports may be intensified (moving from Tier 1 to Tier 3) along a variety of dimensions, including "focus of supports, performance expectations, learning application opportunity, amount and frequency of the support, organization resources, adaptive concerns, contextualization, and acknowledgement of implementation practices" (pp. 11–12). As with any MTSS framework, evidence-based supports can be selected and implemented flexibly, based on data, to maximize efficiency and effectiveness.

For example, a school administrator may ask qualified school professionals (e.g., leadership team members, behavior specialists, special educators, instructional coaches, master teachers, curriculum designers, external consultants) to serve as coaches and deliver a series of brief training events for all teachers on a key classroom practice. Coaches could deliver behavior-specific praise (Tier 1, coach-driven training); send weekly email prompts or reminders about implementing praise in the classroom (Tier 1, coach-driven prompting); ask teachers to collect data on their use of praise during one instructional routine each day (Tier 1, self-monitoring); and build in a routine for teachers to bring their self-collected data to grade-level team meetings, department meetings, or PLCs to share data, discuss implementation challenges, celebrate implementation successes, and set goals for the time period between team meetings (Tier 1, PLCs facilitated by coaches). To augment

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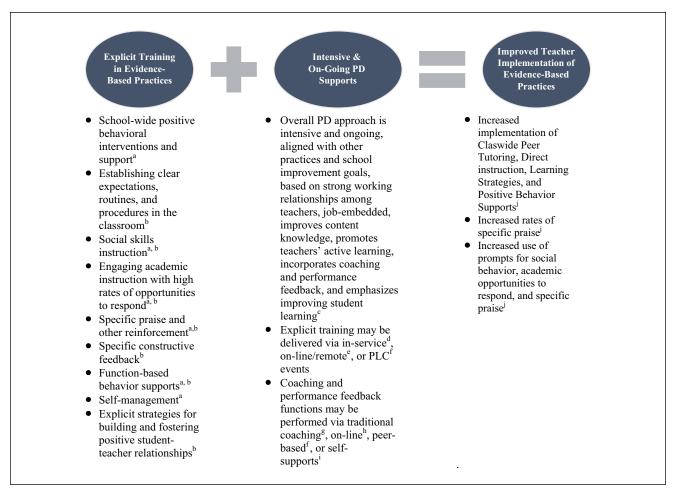


Figure 1. Components of effective educator professional development to support students with Evidence-Based Practices.

Note. PD = professional development; EBD = emotional and behavioral disorders; PLC = professional learning community.

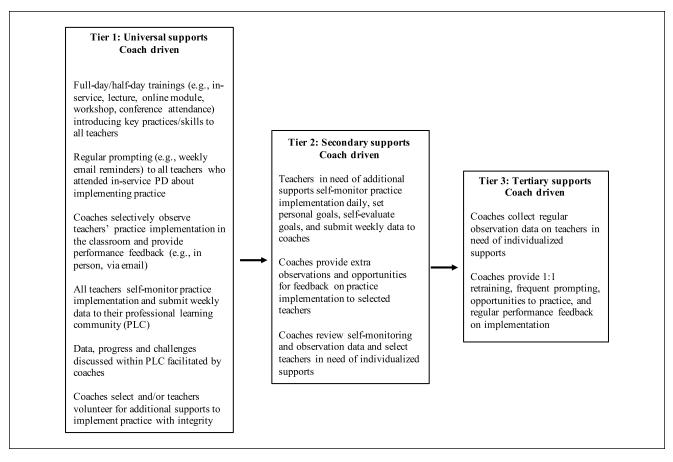
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teachers' self-monitoring data, designated coaches may perform walk-through observations to collect additional data about teachers' implementation of specific praise and provide brief performance feedback (Tier 1, coach-collected observation data and feedback).

Then, coaches may use implementation fidelity data (e.g., teacher self-monitoring and walk-through data) and student-outcome data (e.g., academic scores, measures, office referrals) to proactively identify teachers who need more support in implementing the practice. Coaches can then ask these teachers to engage in an enhanced self-management routine in which they set a personal goal of how many behavior-specific praise statements they would deliver in a period, self-evaluate whether they met their

goal daily, and celebrate when they met their goal (Tier 2, self-management). Coaches may also increase their monitoring of teachers' self-collected data and provide periodic walk-through observations with performance feedback (Tier 2, coach-collected observation data and feedback).

Based on reviewing these data and student outcomes, coaches may proactively identify teachers who require more intensive and individualized support. Coaches may provide 1:1-coaching supports, including reviewing and modeling how to provide behavior-specific praise in the teachers' classrooms, providing frequent prompts or reminders about how to implement behavior-specific praise, collecting regular data, and providing regular performance feedback for these teachers (Tier 3, coach-driven supports).



**Figure 2.** A multitiered system of support framework for delivering effective PD. *Note.* PD = professional development.

Although these specific examples illustrate one way a school leadership team or administrator may operationalize an MTSS framework to support teachers, school leaders may also select a different combination of evidence-based PD supports. Thus, like other MTSS frameworks, the goal is to develop a continuum of evidence-based supports that are selected, implemented, monitored, and adjusted based on data. Most importantly, the PD supports should be intensive and ongoing, be focused on teacher and student learning, provide teachers with opportunities to actively learn on the job, and provide technical assistance and performance feedback regularly.

## Recommendations for Future Research

In summary, we have (a) reviewed challenges in the field related to supporting students with EBD, (b) described core features of effective PD and summarized common approaches to implement PD, and (c) proposed an MTSS framework as one way to organize and deliver PD supports. Although we grounded our discussion in existing empirical literature, a significant need for additional research exists. We recommend

that researchers examine the following applied questions for which there are not clear research bases to guide practice:

- How do school leaders prioritize and select evidencebased classroom practices (what to support), key PD supports (how to support), and teachers who would benefit from support (who to support)?
- Can low-cost, reliable, and valid measures be developed and used to progress monitor teachers' implementation of targeted instructional practices across time and inform the selection, support, and adaptation of evidence-based classroom practices?
- How should school leaders address frequent staff turnover to ensure continued implementation of evidence-based practices?
- Are PD supports differentially effective for teachers of students with EBD in comparison to teachers of typically developing peers?

In short, there is a clear need for more research on how to most effectively and efficiently support teachers' implementation of evidence-based classroom practices. 114 Behavioral Disorders 44(2)

#### **Conclusion**

When considering the educational and postschool outcomes of students with EBD, it is vital to turn attention to the training of, and ongoing support given to, teachers. The training should focus on both general- and special-education teachers, as they increasingly share responsibility in delivering academic and behavioral instruction and supports to students with EBD. The Peacock Hill Working Group convened nearly 30 years ago and noted little agreement on how to prepare teachers. Since then, advances have been made in the research base for effective PD practices, as well as effective practices considered critical to support students with EBD (Lewis et al., 2004). Yet implementation of these practices lags, as has strong and ongoing investments in teachers. Investments including financial resources, time commitment, and rigorous and ongoing training are critical. If real changes in teaching practice that lead to improved student outcomes are the goal, then teachers need ample, effective, and ongoing supports to implement evidencebased and high-leverage practices.

A precious commodity for schools is teachers' time; thus, districts need to think creatively about how to ensure teachers have time to attend workshops, meet with coaches and peers, and engage with online materials. Providing stipends for PD, paying for substitutes to cover teachers' classes, and reducing load by hiring more staff are some suggested approaches to make time for teachers to engage in ongoing PD (Odden, Archibald, Fermanich, & Gallagher, 2002). In parallel, the field needs further local, state, and federal investments in research addressing teacher training to support students with EBD. The Creekbend Behavioral Consortium encourages continuing research on the effectiveness of coaching within an MTSS framework for providing job-embedded, ongoing PD. We call for a renewed focus on how to facilitate implementation and sustainability of evidence-based and high-leverage practices designed to improve outcomes for students with EBD. The only way to improve the outcomes for students with EBD is through investment in the dedicated teachers that support them. It is long overdue that educators, researchers, and policy makers come together and provide the necessary supports for teachers, so they can in turn support their students.

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#### References

- Albrecht, S., Johns, B., Mounsteven, J., & Olorunda, O. (2009). Working conditions as risk or resiliency factors for teachers of students with emotional and behavioral disabilities. *Psychology* in the Schools, 46, 1006–1022. doi:10.1002/pits.20440
- Allinder, R., Bolling, R., Oats, R., & Gagnon, W. (2000). Effects of teacher self-monitoring implementation of curriculum-based measurement and mathematics computation achievement of students with disabilities. *Remedial and Special Education*, 21, 219–226. doi:10.1177/074193250002100403
- Billingsley, B. S., Fall, A., & Williams, T. O., Jr. (2006). Who is teaching students with emotional and behavioral disorders: A profile and comparison to other special educators. *Behavioral Disorders*, 31, 252–264. doi:10.1177/019874290603100301
- Blanton, L. P., & Perez, Y. (2011). Exploring the relationship between special education teachers and professional learning communities: Implications of research for administrators. *Journal of Special Education Leadership*, 24, 6–16. http://www.casecec.org/resources/jsel.asp
- Boe, E. E. (2014). Teacher demand, supply, and shortage in special education: A national perspective. In P. T. Sindelar, E. D. McCray, M. T. Brownell, & B. Lingugaris/Kraft (Eds.), Handbook of research on special education teacher preparation (pp. 67–94). New York, NY: Routledge.
- Caplan, G. (1964). Principles of preventive psychiatry. New York, NY: Basic Books.
- Cook, B. G., & Odom, S. L. (2013). Evidence-based practices and implementation science in special education. *Exceptional Children*, 79, 135–144. doi:10.1177/001440291307900201
- Darling-Hammond, L., Chung Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession: A status report on teacher development in the U.S. and abroad. National Staff Development Council and The School Redesign Network at Stanford University. Retrieved from https://learningforward.org/docs/default-source/pdf/nsdcstudytechnicalreport2009.pdf
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward a better conceptualization and measures. *Educational Researcher*, *38*, 181–199. doi:10. 3102/0013189X08331140
- Desimone, L. M., & Long, D. (2010). Teacher effects and the achievement gap: Do teacher and teaching quality influence the achievement gap between Black and White and high and low-SES students in the early grades? *Teachers College Record*, 112, 3024–3073.
- Dichaba, M. M., & Mokhele, M. L. (2012). Does the cascade model work for teacher training? Analysis of teachers' experiences. *International Journal of Education Science*, 4, 249–254. doi:10.1080/09751122.2012.11890049
- Dooner, A. M., Mandzuk, D., & Clifton, R. A. (2008). Stages of collaboration and the realities of professional learning communities. *Teaching and Teacher Education*, 24, 564–574. doi:10.1016/j.tate.2007.09.009

DuFour, R., & DuFour, R. (2015). Learning by doing: A hand-book for professional learning communities. Bloomington, IN: Solution Tree Press.

- Erickson, A. S. G., Noonan, P. M., & McCall, Z. (2012). Effectiveness of online professional development for rural special educators. *Rural Special Education Quarterly*, 31, 22–32. doi:10.1177/875687051203100104
- Forness, S. R., Freeman, S. F., Paparella, T., Kauffman, J. M., & Walker, H. M. (2012). Special education implications of point and cumulative prevalence for children with emotional or behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 20, 4–18. doi:10.1177/1063426611401624
- Forness, S. R., Kim, J., & Walker, H. M. (2012). Prevalence of students with EBD: Impact on general education. *Beyond Behavior*, 21(2), 3–10.
- Freeman, J., Simonsen, B., Goodman, S., Mitchell, B., George, H. P., Swain-Bradway, J., & Putnam, B. (2017). PBIS technical brief on systems to support teachers' implementation of positive classroom behavior support. Eugene, OR: PBIS Center.
- Freeman, J., Sugai, G., Simonsen, B., & Everett, S. (2017). MTSS coaching: Bridging knowing to doing. *Theory Into Practice*, 56, 29–37. doi:10.1080/00405841.2016.1241946
- Gable, R. A., Tonelson, S. W., Sheth, M., Wilson, C., & Park, K. L. (2012). Importance, usage, and preparedness to implement evidence-based practices for students with emotional disabilities: A comparison of knowledge and skills of special education and general education teachers. *Education and Treatment of Children*, 35, 499–519. doi:10.1353/etc.2012.0030
- Gage, N. A., Adamson, R., MacSuga-Gage, A. S., & Lewis, T. J. (2017). The relation between the academic achievement of students with emotional and behavioral disorders and teacher characteristics. *Behavioral Disorders*, 43, 213–222. doi:10.1177/0198742917713211
- Gage, N. A., Scott, T., Hirn, R., & MacSuga-Gage, A. S. (2017). The relationship between teachers' implementation of class-room management practices and student behavior in elementary school. *Behavioral Disorders*, 43, 302–315. doi:10.1177/0198742917714809
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38, 915–945. doi:10.3102/00028312038004915
- Greenwood, C. R., & Abbott, M. (2001). The research to practice in special education. *Teacher Education and Special Education*, 24, 276–289. doi:10.1177/088840640102400403
- Gregory, A., Allen, J. P., Mikami, A. Y., Hafen, C. A., & Pianta, R. C. (2014). Effects of a professional development program on behavioral engagement of students in middle and high school. *Psychology in the Schools*, 51, 143–163. doi:10.1002/pits.21741
- Hairon, S., Goh, J. W. G., & Chua, C. S. K. (2015). Teacher leadership enactment in professional learning community contexts: Towards better understanding of the phenomenon. *School Leadership & Management*, 35, 163–182. doi:10.1080 /13632434.2014.992776
- Hamre, B. K., Pianta, R. C., Mashburn, A. J., & Downer, J. T. (2012). Promoting young children's social competence through the preschool paths curriculum and my teaching partner professional development resources. *Early Education*

- and Development, 23, 809-832. doi:10.1080/10409289.201
- Hardman, E. (2011). Building professional learning communities in special education through social networking: Directions for future research. *Journal on School Educational Technology*, 7, 30–38. doi:10.26634/jsch.7.2.1651
- Henderson, K., Klein, S., Gonzalez, P., & Bradley, R. (2005).
  Teachers of children with emotional disturbance: A national look at preparation, teaching conditions, and practices. *Behavioral Disorders*, 31, 6–17. doi:10.1177/019874290503100101
- Hirn, R. G., & Scott, T. M. (2014). Descriptive analysis of teacher instructional practices and student engagement among adolescents with and without challenging behavior. *Education* and *Treatment of Children*, 37, 589–610. doi:10.1353/ etc.2014.0037
- Jimenez, B. A., Mims, P. J., & Baker, J. (2016). The effects of an online data-based decisions professional development for inservice teachers of students with significant disability. *Rural Special Education Quarterly*, 35(3), 30–34. doi:10.1177/ 875687051603500305
- Katsiyannis, A., Zhang, D., & Conroy, M. A. (2003). Availability of special education teachers: Trends and issues. *Remedial* and Special Education, 24, 246–253. doi:10.1177/07419325 030240040701
- Keller, C. L., Brady, M. P., & Taylor, R. L. (2005). Using self-evaluation to improve student teacher interns' use of specific praise. *Education and Training in Developmental Disabilities*, 40, 368–376. Retrieved from https://pdfs.semanticscholar.org/2a40/f1be7cf832102d17ddd7979d266761d402f8.pdf
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88, 547–588. doi:10.3102/0034654318759268
- Kretlow, A. G., & Bartholomew, C. C. (2010). Using coaching to improve the fidelity of evidence-based practices: A review of studies. *Teacher Education and Special Education*, 33, 279– 299. doi:10.1177/0888406410371643
- Lane, K. L., Barton-Arwood, S. M., Nelson, J. R., & Wehby, J. H. (2008). Academic performance of students with emotional and behavioral disorders served in self-contained setting. *Journal of Behavioral Education*, 17, 43–62. doi:10.1007/s10864-007-9050-1
- Lane, K. L., Jolivette, K., Conroy, M., Nelson, C. M., & Benner, G. J. (2011). Future research directions for the field of EBD: Standing on the shoulders of giants. *Education and Treatment* of *Children*, 34, 423–443. Retrieved from http://www.jstor.org/stable/42900127
- Lewis, T. J., Hudson, S., Richter, M., & Johnson, N. (2004). Scientifically supported practices in emotional and behavioral disorders: A proposed approach and brief review of current practices. *Behavioral Disorders*, 29, 247–259. doi:10.1177/019874290402900306
- Little, J. W. (2002). Locating learning in teachers' communities of practice: Opening up problems of analysis in records of everyday work. *Teaching and Teacher Education*, *18*, 917–946. doi:10.1016/s0742-051x (02)00052-5
- Lomos, C., Hofman, R. H., & Bosker, R. (2011). Professional communities and student achievement: A meta-analysis.

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School Effectiveness and School Development, 22, 121–148. doi:10.1080/09243453.2010.550467

- Marquez, B., Vincent, C., Marquez, J., Pennefather, J., Smolkowski, K., & Sprague, J. (2016). Opportunities and challenges in training elementary school teachers in classroom management: Initial results from classroom management in action, an online professional development program. *Journal of Technology and Teacher Education*, 24, 187–109. Retrieved from https://files.eric.ed.gov/fulltext/EJ1092428.pdf
- McLaughlin, M. W., & Talbert, J. E. (2006). Building school-based teacher learning communities: Professional strategies to improve student achievement. New York, NY: Teachers College Press.
- McLeskey, J., & Billingsley, B. S. (2008). How does the quality and stability of the teaching force influence the research-topractice gap? A perspective on the teacher shortage in special education. *Remedial and Special Education*, 29, 293–305. doi:10.1177/0741932507312010
- McLeskey, J., Maheady, L., Billingsley, B., Brownell, M., & Lewis, T. (2018). *High-leverage practices for inclusive class-rooms*. Arlington, VA: Council for Exceptional Children.
- Mikami, A., Gregory, A., Allen, J. P., Pianta, R. C., & Lun, J. (2011). Effects of a teacher professional development intervention on peer relationships in secondary classrooms. *School Psychology Review*, 40, 367–385.
- Odden, A., Archibald, M. F., Fermanich, M., & Gallagher, H. A. (2002). A cost framework for professional development. *Journal of Education Finance*, 28, 51–74.
- Oliver, R. M., & Reschly, D. J. (2010). Special education teacher preparation in classroom management: Implications for students with emotional and behavioral disorders. *Behavioral Disorders*, 35, 188–199. doi:10.1177/019874291003500301
- Ono, Y., & Ferreira, J. (2010). A case study of continuing teacher professional development through lesson study in South Africa. South African Journal of Education, 30, 59–74.
- Peacock Hill Working Group. (1991). Problems and promises in special education and related services for children and youth with emotional or behavioral disorders. *Behavioral Disorders*, *16*, 299–313. doi:10.1177/019874299101600406
- Pianta, R. C., Mashburn, A. J., Downer, J. T., Hamre, B. K., & Justice, L. (2008). Effects of web-mediated professional development resources on teacher-child interactions in pre-kindergarten classrooms. *Early Childhood Research Quarterly*, 23, 431–451. doi:10.1016/j.ecresq.2008.02.001
- Reinke, W. M., Stormont, M., Herman, K. C., & Newcomer, L. (2014). Using coaching to support teacher implementation of classroom-based interventions. *Journal of Behavioral Education*, 23, 150–167. doi:10.1007/s10864-013-9186-0
- Schaap, H., & deBruijn, E. (2018). Elements affecting the development of professional learning communities in schools. *Learning Environment Research*, 21, 109–134. doi:10.1007/s10984-017-9244-y
- Simonsen, B., Freeman, J., Dooley, K., Maddock, E., Kern, L., & Myers, D. (2017). Effects of targeted professional development on teachers' specific praise rates. *Journal of Positive Behavior Interventions*, 19, 37–47. doi:10.1177/1098300716637192

- Simonsen, B., MacSuga-Gage, A. S., Briere, D. E., Freeman, J., Myers, D., Scott, T., & Sugai, G. (2014). Multi-tiered support framework for teachers' classroom management practices: Overview and case study of building the triangle for teachers. *Journal of Positive Behavior Interventions*, 16, 179–190. doi:10.1177/1098300713484062
- Simonsen, B., Myers, D., & DeLuca, C. (2010). Teaching teachers to use prompts, opportunities to respond, and reinforcement. *Teacher Education in Special Education*, *33*, 300–318. doi:10.1177/0888406409359905
- Siperstein, G. N., Wiley, A. L., & Forness, S. R. (2011). School context and the academic and behavioral progress of students with emotional disturbance. *Behavioral Disorders*, 36, 172–184.
- Skinner, B. F. (1953). Science and human behavior. New York, NY: Macmillan.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7, 221–258. doi:10.1007/s10833-006-0001-8
- Stormont, M., Reinke, W., & Herman, K. (2011). Teachers' knowledge of evidence-based interventions and available school resources for children with emotional and behavioral problems. *Journal of Behavioral Education*, 20, 138–147. doi:10.1007/10864-011-9122-0
- Sutherland, K. S., Denny, R. K., & Gunter, P. L. (2005). Teachers of students with emotional and behavioral disorders reported professional development needs: Differences between fully licensed and emergency-licensed teachers. *Preventing School Failure: Alternative Education for Children and Youth*, 49(2), 41–46. doi:10.3200/psfl.49.2.41-46
- Sutherland, K. S., & Wehby, J. H. (2001). The effect of self-evaluation on teaching behavior in classrooms for students with emotional and behavioral disorders. *The Journal of Special Education*, *35*, 161–171. doi:10.1177/002246690103500306
- Tam, A. C. F. (2015). The role of a professional learning community in teacher change: A perspective from beliefs and practices. *Teachers and Teaching: Theory and Practice*, *21*, 22–43. doi:10.1080/13540602.2014.928122
- U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs. (2016). 38th annual report to Congress on the implementation of the Individuals With Disabilities Education Act, 2016. Washington, DC: Author.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24, 80–91. doi:10.1016/j.tate.2007.01.004
- Yoon, K. S., Duncan, T., Lee, S. W., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007-No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/REL 2007033.pdf

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