

CHAPTER 1

Foundations of Classwide Positive Behavioral Interventions and Supports

CHAPTER OBJECTIVES

By the end of this chapter, you should be able to . . .

1. Describe positive behavioral interventions and supports (PBIS).
2. Summarize the supporting evidence for organizing empirically supported practices within a PBIS framework.
3. Identify the theoretical foundations of PBIS.

***Imagine This:** It is your first day of teaching. You have spent days creating the perfect visual displays in your classroom to enhance learning, you've arranged desks so that there are perfect 90-degree angles everywhere you turn, and your well-planned lesson is ready to go. As the bell rings, your students arrive for first period, wearing shirts that advertise bands you have never heard of (even though you don't think of yourself as that much older than these students) and looking at the latest video circulating social media on their phones. The first few students enter the room and walk through (rather than around) the groups of neatly arranged desks and destroy your perfect right angles. You hear a pair of students making fun of your colorful visual displays, and you look out on a group of students who are giving you suspicious looks. All of a sudden, you are not sure where to begin.*

OVERVIEW OF POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORTS

Teaching is an exciting and sometimes overwhelming profession. You are asked to identify evidence-based practices; differentiate your instruction to meet the needs of each of your stu-

dents, who enter your classroom with a variety of academic and behavioral strengths and challenges; deliver high-quality instruction in an engaging manner; assess students' learning relative to established standards; and complete a myriad of other tasks (that were likely left out of your job description). To meet any of these demands, you must also support and respond to students' social, emotional, and behavioral needs. Unfortunately, many teachers—especially those early in their career—feel unprepared to support students' social, emotional, and behavioral needs (Gable et al., 2012; Reinke, Stormont, et al., 2011) and express concerns about student behavior (Bushaw & Lopez, 2010; Harrison et al., 2012).

Luckily, researchers have spent decades identifying specific practices that will allow you to create and maintain a welcoming, positive, organized, and effective classroom environment, and we have distilled that research into a user-friendly text that will set you up for success in creating a classroom environment that supports your students' educational, social, emotional, and behavioral needs. We have also organized these strategies within a **positive behavioral interventions and supports (PBIS)** framework, which provides the theoretical and empirical foundations for the classroom management strategies we discuss. In this chapter, we provide an overview of PBIS, describe the empirical support for PBIS, discuss the theoretical foundations for PBIS, and introduce the phases of learning, which we use throughout this book to organize follow-up activities for each chapter. We conclude this chapter with an overview of the remaining chapters in the book.

PBIS Is a Prevention Framework

PBIS is a prevention **framework** for organizing evidence-based practices within your school and classroom to meet the needs of individual students (Center on PBIS, 2023b). In other words, PBIS is *not* a curriculum or a “packaged” approach. PBIS *is* a problem-solving approach (e.g., Lewis et al., 2010) that emphasizes (1) providing a continuum of support for all students; (2) evaluating the implementation and outcomes of those supports; and (3) using data to guide decision making about how to improve or sustain implementation, when to identify additional interventions for students (or staff) who require more support to be successful, and how to provide and monitor those supports to promote success. Thus, PBIS counteracts the traditional “wait-to-fail” models that characterized the old way of doing business and moves us toward a prevention-based approach.

PBIS is based on decades of work in public health and prevention science (e.g., Caplan, 1964; Walker et al., 1996), which has taught us to invest in universal prevention (Tier 1) for all, identify and provide secondary prevention (Tier 2, or targeted supports) for individuals who have elevated needs, and provide tertiary prevention (Tier 3, or individualized and intensive supports) for individuals with chronic or significant needs (e.g., Sugai & Horner, 2006; Walker et al., 1996). This continuum of support, often depicted as a triangle (see Figure 1.1), is also known in schools as a multi-tiered system of support (MTSS) framework (e.g., Sugai & Horner, 2009) or a similar name (see I-MTSS Research Network, 2023). This approach may (and should!) be applied to supporting students across both academic and behavioral support (see www.mtss.org). PBIS refers to the “triangle” as it applies to supporting students' social, emotional, and behavioral needs, and the next paragraphs describe what PBIS looks like across each tier.

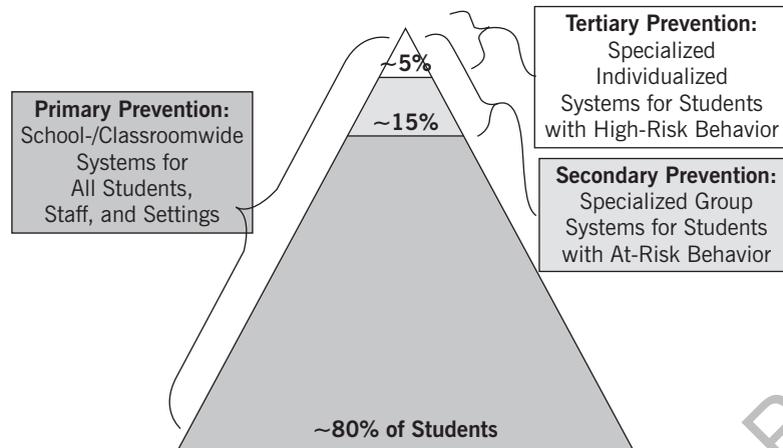


FIGURE 1.1. Continuum of academic and behavioral support. Adapted from www.pbis.org. Used with permission from the National Technical Assistance Center on Positive Behavioral Interventions and Supports.

Tier 1 Support

All staff members provide Tier 1 support for *all* students across *all* settings. In other words, Tier 1 supports should be universal and inclusive—ensuring that all students, including students with disabilities, are able to access, engage in, and benefit from Tier 1 support (Meyer et al., 2021; Simonsen et al., 2020). Although members of each school community should collaboratively identify culturally and contextually relevant practices for their setting (e.g., Levenson et al., 2021; Sugai et al., 2012), there are common practices that occur within Tier 1. Specifically, members of the school community:

- Identify a few (three to five) positively stated expectations or norms for their school (e.g., safety, kindness, and responsibility).
- Define and explicitly teach these expectations or norms across school and classroom settings and routines (e.g., “What does it look like to be safe in the cafeteria?” “How do you show kindness when entering the classroom?”).
- Arrange the school and classroom environment to promote contextually appropriate behavior (i.e., those behaviors that are consistent with classroom community norms) and prevent contextually inappropriate behavior (i.e., behaviors that are not consistent with norms). That is, increase visual prompts, modify the physical environment, and increase active supervision across all settings.
- Implement a continuum of strategies to recognize students for contextually appropriate behavior (i.e., focus on “catching” and increasing contextually appropriate behavior).
- Implement a continuum of strategies to supportively respond to students following contextually inappropriate behavior or mistakes (i.e., respond predictably to contextually inappropriate behavior with an instructional focus to help prevent similar mistakes in the future).
- Use data to guide and evaluate implementation of supports for all students.

To implement Tier 1 support, a representative team of school staff, family members, students, and community members with diverse areas of expertise and backgrounds (e.g., administrator, teachers who are representative of grades or content areas, specialized or support staff, noncertified staff, students, families, community mental health providers) participate in training activities, develop an action plan to guide implementation, and provide ongoing professional development to all staff in the building. This team meets regularly to plan, monitor, and evaluate implementation of Tier 1 support across all school environments (classroom and nonclassroom). This team also develops systems to support and recognize staff implementation efforts. We describe schoolwide implementation of Tier 1 support in Chapter 3. When Tier 1 support is implemented with fidelity (i.e., as intended), schools can expect most students (approximately 80%) to be successful; however, some students (approximately 20%) will continue to require additional layers of support.

Tier 2 Support

Students who continue to demonstrate elevated social, emotional, and behavioral needs across settings (e.g., repeated low-level disruptions, frequent requests to visit the nurse for reasons that are not known to be medically necessary) may benefit from Tier 2, or targeted, support. Generally, you can think of Tier 2 as intensifying each of the practices included in Tier 1 (listed in the dot points in the previous section). For example, if you are prompting, teaching, and reinforcing expectation-following behaviors in Tier 1, you would want to (1) *increase* the number and salience of prompts, (2) *intensify* instruction (i.e., increase explicitness, decrease group size, target specific skills), and (3) *enhance* the schedule and intensity of available reinforcement in Tier 2. Because one size does not fit all, schools typically offer a “menu” of empirically supported Tier 2 interventions including, for example, Check-In/Check-Out (CICO), or the Behavior Education Program (Fairbanks et al., 2007; Hawken et al., 2021); small-group social skills training (Cho Blair et al., 2020; Kern et al., 2020; Lane et al., 2003); self-management approaches (Briesch & Chafouleas, 2009); First Step to Success (Walker et al., 1997) for younger (PreK–3) learners; Check & Connect (Anderson et al., 2004; Sinclair et al., 1998, 2005); Check, Connect, and Expect (CCE; Cheney et al., 2009); or some combination of these approaches. We explore these intervention approaches further in Chapter 9.

To implement Tier 2 supports, each school identifies a team of staff members with educational and behavioral expertise (e.g., administrator, special educator, counselor, social worker, school psychologist, general educator) who (1) review existing student data and nominations (e.g., teacher, student, or family requests for support) to identify students in need of Tier 2 support, (2) use data to identify an appropriate Tier 2 intervention “match” for each identified student, (3) plan for and ensure implementation of the selected intervention, (4) review data regularly (weekly or biweekly) to monitor each student’s response to Tier 2 intervention, and (5) make decisions about each student’s ongoing intervention (i.e., fade support and return to Tier 1, maintain or adjust support in Tier 2, increase support to Tier 3). Although most students who require additional support will respond to Tier 2, some students will need even more intensive and individualized Tier 3 support.

Tier 3 Support

Students who have significant or consistently unmet social, emotional, and behavioral needs (e.g., students who engage in highly disruptive or dangerous behavior, students who experience anxiety that interferes with their day) are candidates for the intensive and individualized support provided in Tier 3. To implement Tier 3 support, an individualized team is formed, including members with social, emotional, and behavioral expertise (e.g., school psychologist, school counselor, special educator, community mental health provider), student expertise (family and student), and educational expertise (e.g., special educator, general educator), to guide the assessment and intervention process. First, the team members plan, conduct, and review results of a **functional behavioral assessment (FBA)**. An FBA is a systematic process for studying a student's behavior using multiple sources of information generated by multiple informants and documenting patterns of behavior over time (e.g., student records, interviews with team members, and direct observations). The FBA should identify the ABCs: antecedents (A) that predict when contextually inappropriate behaviors are likely to occur, describe the specific nature of the contextually inappropriate behaviors (B), and document the consequences (C) that typically follow (and likely reinforce) the contextually inappropriate behaviors (Crone et al., 2015). In other words, the FBA should articulate the "function," or purpose, the contextually inappropriate behaviors serve for the learner. All behaviors function to either get/obtain access to or escape/avoid various stimuli (e.g., attention, items, activities, stimulation). We explore the ABCs of behavior and function in Chapter 2, and we take a closer look at (1) ways to intensify your classroom practice to meet the needs of students with individualized social, emotional, and behavioral needs and (2) how to participate in FBA and individualized intervention planning in Chapter 10.

Once an FBA has identified the function of a student's contextually inappropriate behavior, the team should work to develop an individualized and positive **behavior support plan (BSP)**. A comprehensive BSP should include (1) antecedent strategies that modify the environment to prompt or occasion contextually appropriate behavior and remove triggers for contextually inappropriate behavior, (2) instructional strategies to explicitly teach contextually appropriate behaviors that "replace" the contextually inappropriate behavior and shape toward long-term desired behaviors (e.g., instead of ripping up work, please ask for a break), and (3) consequence strategies that ensure that contextually appropriate behaviors "work" for the student (i.e., result in reinforcement) and contextually inappropriate behaviors do not. The individualized team should ensure that all staff members who support the student are trained to implement the BSP, monitor implementation and outcomes, and adjust the plan, if necessary, based on data (Crone et al., 2015).

In addition to school-based interventions documented in a BSP, some students will need supports that extend beyond the walls of the school building. For example, students involved with multiple agencies (e.g., child protective services, external mental health agencies, juvenile justice) may benefit from student- and family-centered supports that are identified, planned, implemented, and monitored via a person-centered planning (e.g., Artesani & Mallar, 1998) or wraparound process (e.g., Scott & Eber, 2003). If you have a student who requires this level of support, contact your school- or district-based social worker, administrator, school counselor, or other local expert to request assistance.

Essential Elements of PBIS

Across each of the tiers, PBIS emphasizes five essential elements: equity, outcomes, data, practices, and systems (Center on PBIS, 2023b), which are illustrated in Figure 1.2. As depicted in that graphic, teams center **equity** to ensure they are making decisions that reflect their students', families', and educators' unique and collective cultural backgrounds and learning histories (i.e., the experiences they bring with them that affect how they experience school). Equity is a throughline that connects all other essential elements.

Outcomes are locally determined, contextually and culturally relevant, observable, and measurable goal statements that describe indicators of successful implementation of PBIS for students and staff. For example, a school may want to decrease the number (or percentage) of students suspended or expelled by the end of the year. A possible outcome statement for that school may be "Given schoolwide implementation of PBIS with fidelity, we will decrease the number of students suspended or expelled by 25% by the end of the school year." As another example, a teacher may notice issues with homework completion during the first quarter and may want to increase her students' homework completion during the second quarter. An appropriate outcome for this situation may be "As a result of teaching and rewarding homework completion, students in my classroom will submit homework on 80% of opportunities across the second quarter."

To know which outcomes are relevant and to set realistic criteria for success, schools and teachers must collect and use data (Simonsen & Sugai, 2007; Simonsen et al., 2019). In this context, the word **data** refers to quantitative indicators of implementation fidelity and effectiveness. Schools and teachers routinely collect data on students' social, emotional, and behavioral strengths and needs (e.g., brief rating scales or screeners, observations of students' skills), academic performance (e.g., curriculum-based assessments, teacher-created measures, district- or statewide test scores), requests for support (e.g., mental health requests, visits to nurse), attendance (e.g., tardiness and truancy), discipline (e.g., office referrals, suspensions, expulsions), and other key indicators of strengths and needs. In addition, schools and teachers should collect data on fidelity of implementation to ensure that interventions are being implemented as intended.

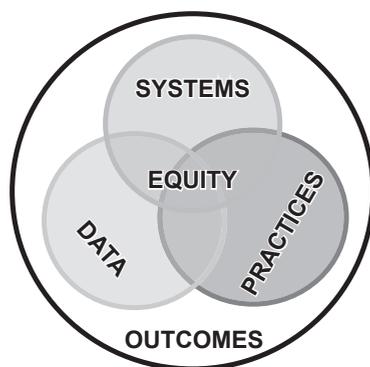


FIGURE 1.2. Essential elements of PBIS: equity, outcomes, data, practices, and systems. Adapted from *www.pbis.org*. Used with permission from the National Technical Assistance Center on Positive Behavioral Interventions and Supports.

By reviewing data regularly, school teams can make decisions to select, adjust, or discontinue practices within or across each of the tiers.

Practices are the interventions and supports for students. As you recall (or you may flip back to review), we described examples of practices within each tier in the previous section. Given the diversity of students, staff, and school settings, all practices should be selected and adjusted to ensure they are culturally and contextually relevant (Levenson et al., 2021). For example, teaching, prompting, and reinforcing agreed upon norms or expectations should be taught across all grade levels, but it “looks” different in kindergarten than it does in 12th grade. Similarly, involving family members in developing a Tier 3 BSP may look different depending on whether it will be implemented in a suburban elementary school, a middle school on a reservation, an urban high school, or a rural K–12 school. Therefore, it is critical that staff and teachers involve partners across their school community (staff, students, and families) to identify, implement, and evaluate evidence-based practices to ensure that both the practices and the implementation are culturally and contextually relevant (Levenson et al., 2021).

To promote the sustained implementation of practices with fidelity (i.e., consistently implementing practices as they are designed), schools invest in **systems** to support staff. Systems include supportive administrator participation; teaming structures (i.e., schoolwide team to support Tier 1, advanced tiers system team(s) to support Tier 2 and/or Tier 3, and individual student-centered teams to support each student receiving supports in Tier 3); professional development (ongoing training and coaching); staff recognition; data structures that facilitate easy input and flexible output; and other organizational supports for staff. Of all the essential elements, systems to support staff are perhaps the most critical for you: without a positive work environment and engaged, positive, and dedicated staff members, none of the other elements are possible!

In summary, PBIS schools center *equity* and select locally meaningful, measurable *outcomes* to evaluate their *data-driven* implementation of student-focused *practices* and staff-focused *systems*. In Chapters 3 and 4, we describe these five essential elements of implementing PBIS within your school (schoolwide PBIS) and your classroom (classwide PBIS) in much greater detail. For now, we turn to the empirical support for PBIS.

EMPIRICAL SUPPORT FOR PBIS

Before we continue to discuss PBIS, we thought you might appreciate a quick overview of the research that supports PBIS. That way, you don't have to take our word for it; you can decide for yourself if this is an approach that you think will work in your classroom, school, or both. We briefly describe the evidence supporting implementation of each tier of support, and interested readers are encouraged to view a more complete description presented by Santiago-Rosario et al. (2023).

Support for Tier 1

There are numerous randomized control trials (considered a “gold standard” in research) that support positive outcomes for schools implementing Tier 1 of schoolwide PBIS (e.g., Bradshaw et al., 2008, 2009, 2010, 2012, 2015; Horner et al., 2009; Waasdorp et al., 2012). In particular,

research has demonstrated that schools that implement PBIS experience increases in students' prosocial behavior (Bradshaw et al., 2012); decreases in exclusionary discipline (documented by office referrals, suspensions, and expulsions; Bradshaw et al., 2010, 2012; Horner et al., 2009); increases in organizational health (Bradshaw et al., 2008, 2009); decreases in reported instances of bullying (Waasdorp et al., 2012); and tentative (i.e., promising but not statistically significant) improvements in academic outcomes (Bradshaw et al., 2010; Horner et al., 2009) relative to control schools. Among student groups, some studies have shown the greatest effects for students with the greatest needs (e.g., Bradshaw et al., 2015; Condliffe et al., 2022); and other research has demonstrated promising effects for students with disabilities (e.g., Center on PBIS, 2022d). Further, evidence suggests that schools that implement with high fidelity outperform schools that implement with lower fidelity (e.g., Simonsen, Eber, et al., 2012), and schools that center equity begin to close discipline gaps between students of color and white peers (e.g., Santiago-Rosario et al., 2022).

Beyond school-level implementation, emerging research supports an important role of districts in promoting fidelity (Kittelman et al., 2023) and sustainability (McIntosh et al., 2018) of schoolwide PBIS implementation. In addition, evaluation studies demonstrate that scaling these supports for districts and states also leads to positive outcomes (e.g., Barrett et al., 2008; McIntosh et al., 2011; Muscott et al., 2008). Given this evidence, it is not surprising that so many schools have adopted a schoolwide PBIS framework: there are more than 25,000 schools implementing PBIS in the United States with the support of the National Technical Assistance Center on Positive Behavioral Interventions and Supports (www.pbis.org), and additional schools implementing PBIS across the world. (We're going for planet-wide PBIS!)

Support for Tier 2

As described, schools typically offer a menu of Tier 2 supports to meet the diverse needs of students whose behaviors are unresponsive to Tier 1. Fortunately, empirical evidence suggests that the following Tier 2 interventions are associated with positive student outcomes: CICO (Fairbanks et al., 2007; Hawken & Horner, 2003; Hawken et al., 2007; Simonsen et al., 2011); small-group social skills training (Cho Blair et al., 2020; Kern et al., 2020; Lane et al., 2003); self-management (Briesch & Chafouleas, 2009); First Step to Success (Sumi et al., 2013; Walker et al., 2009); Check & Connect (Anderson et al., 2004; Sinclair et al., 1998, 2005); and CCE (Cheney et al., 2009). You should identify the best match between the student and intervention based on data about the type and function of behavioral need. For example, CICO is likely more appropriate for students whose behaviors function to obtain attention than for students whose behaviors function to escape stimuli (March & Horner, 2002; McIntosh et al., 2009), unless adjustments are made to implementation. Therefore, ongoing data collection and monitoring are critical to determine if a student is benefiting from a particular Tier 2 intervention and whether the supports need to be faded (to Tier 1), modified (by selecting a different Tier 2 approach), or intensified (to Tier 3).

Support for Tier 3

Within Tier 3, supports should be individualized, intensified, and function based. Empirical evidence suggests that function-based support (i.e., BSP based on FBA, as previously described)

is more effective than similarly intensive supports that are not based on function (e.g., Ingram et al., 2005; Walker et al., 2018). Further, systematic literature reviews and meta-analyses, which summarize numerous individual experimental studies, document the positive effects of function-based support for students (Gage et al., 2012; Goh & Bambara, 2012; Snell et al., 2005). For students with complex needs that extend beyond school-based services, emerging evidence supports the use of person-centered planning (e.g., Artesani & Mallar, 1998; Claes et al., 2010; Kennedy et al., 2001) or wraparound process (e.g., Eber et al., 1996; Olson et al., 2021; Suter & Bruns, 2009) to identify, monitor, and coordinate supports.

In conclusion, empirical evidence upholds providing Tier 1, Tier 2, and Tier 3 supports within a PBIS framework. Perhaps the strongest evidence base exists for schoolwide Tier 1 support, specific Tier 2 interventions, and function-based support at Tier 3. Although the majority of the studies focused on schoolwide implementation, evidence also suggests that it is possible to implement all three Tiers within your classroom (e.g., Fairbanks et al., 2007). Given the quantity and quality of evidence, we hope you are now convinced that organizing empirically supported interventions within a PBIS framework is a good idea for your school and classroom. Now that we have demonstrated that PBIS “works” (i.e., results in positive outcomes), we will turn to *why* it works, or the theoretical foundations of PBIS.

THEORETICAL FOUNDATIONS OF PBIS

PBIS is grounded in behaviorism, a theoretical approach with rich empirical support in psychology, education, and related fields. Behaviorism emerged out of an early scientific emphasis on studying what can be directly observed, which was prevalent in approaches like functionalism and positivism (Alberto et al., 2021). Advances in the natural sciences further influenced behaviorism. For example, Charles Darwin’s (1809–1892) observations about natural selection are referenced in both Skinner’s description of Thorndike’s law of effect (Skinner, 1963) and Skinner’s own description of selection by consequences (Skinner, 1953, 1974). Although there are many scientists who have contributed to our understanding of behavioral theory, including Edward Thorndike (1874–1949) and John Watson (1878–1958), perhaps none are better known than Ivan Pavlov (1849–1936) and B. F. Skinner (1904–1990). In the next sections, we explore the major contributions from Pavlov and Skinner: respondent and operant conditioning, respectively. Then we describe a purposeful shift toward an applied science of behavior: applied behavior analysis. Finally, we highlight some of the other influences that continue to shape PBIS.

Early Behavioral Foundations: Respondent and Operant Conditioning

There are two primary methods to explain why behaviors occur within a behavioral approach. **Respondent conditioning** (also known as **classical conditioning**), which was initially documented by Pavlov (1927/1960), focuses on “reflexive,” or involuntary, behaviors that are conditioned to occur under different conditions. In contrast, **operant conditioning**, documented by Skinner (e.g., 1953, 1963), focuses on behavior that “acts on the environment to produce consequences” (Skinner, 1969), or voluntary behaviors. We explore each type of conditioning on the following pages.

Respondent Conditioning

Respondent conditioning occurs when an **unconditioned stimulus**, which elicits an **unconditioned response** (i.e., an unlearned behavior or reflex), is consistently paired with a neutral stimulus. As a result of the pairing, the previously neutral stimulus elicits the same response in the absence of the original unconditioned stimulus. Thus, the neutral stimulus becomes a **conditioned stimulus**, and the response is now called a **conditioned response**. In his classic experiment (see Figure 1.3), Pavlov was studying the salivation of dogs (a reflexive response). Specifically, he presented the dogs with food (unconditioned stimulus) and measured their salivation (unconditioned response). However, Pavlov noticed that the dogs also started to salivate when they saw the research assistants in their lab coats, regardless of whether the assistants had food. To understand why that would occur, Pavlov began a series of experiments in which he paired a tone (previously neutral stimulus) with the food and measured salivation. Over time, he found that the tone began to elicit salivation even when food was not present. Thus, the tone had become a conditioned stimulus, which elicited a conditioned response (salivation).

Although examples of this type of conditioning may not be as obvious in your classroom, you may find that some students engage in reflexive behaviors under atypical circumstances as a result of respondent conditioning. For example, a neutral stimulus (e.g., object, person, activity) may have been present when a student initially experienced an unconditioned fight-or-

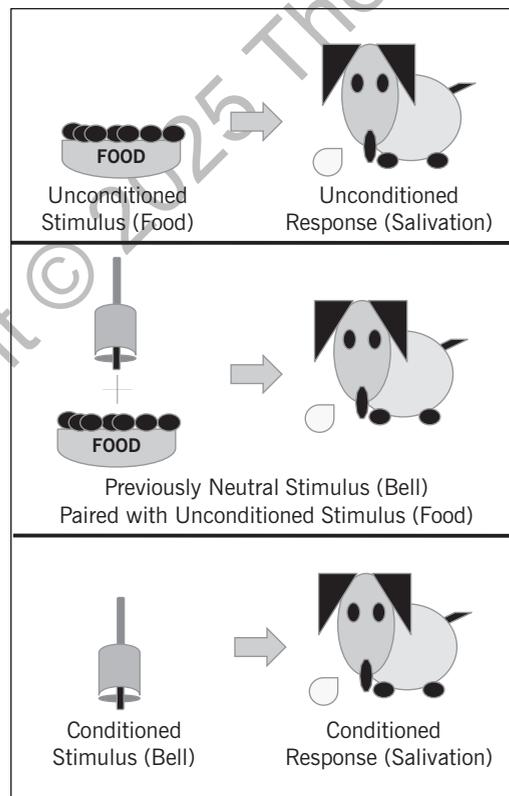


FIGURE 1.3. This simple sequence illustrates respondent, or classical, conditioning.

flight response to an unconditioned stimulus (i.e., pain, imminent threat of harm). This neutral stimulus may have been conditioned to elicit the same fight-or-flight response under seemingly neutral conditions: for example, a student may cower when he smells burnt popcorn if he was hit for burning popcorn in the past. Far more common, however, are behaviors that have been strengthened through operant conditioning.

Operant Conditioning

With operant conditioning, consequences may increase (reinforce) or decrease (punish) a learner's use of a specific behavior. The behaviors are learned and voluntary (i.e., a learner may "choose" to engage in the behavior or not), not reflexive. In Skinner's classic experiments, he worked with hungry rats and pigeons, and he used food to increase a variety of learned behaviors, from pressing or pecking a lever to more elaborate responses. Based on his early work, Skinner documented two key concepts: (1) a **contingency**—or the relation between a behavior and its consequence—affects the future probability of that behavior, and (2) behavior can be **reinforced** (i.e., strengthened or increased) with the use of contingent reinforcers, including those that have biological importance (i.e., food). He also demonstrated that antecedent stimulus conditions affected the probability of behavior occurring if they were consistently associated with the availability of reinforcement (i.e., food). For example, if food was only available when a light was on, then a rat would learn to press the bar only in the presence of the light. In this example, the light was a **discriminative stimulus**, as it signaled the availability of reinforcement (i.e., food). This concept recurs again in Chapter 2, when we discuss the various types of antecedents that affect behavior.

You may see numerous examples of operant conditioning in your classroom. Generally speaking, consider that students continue to engage in behaviors that have resulted in previous reinforcement under similar stimulus conditions (i.e., in a classroom setting). For some students, this means that they are kind, responsible, and safe. For other students, this may mean that they engage in disruptive or withdrawn behavior, especially within specific classroom routines, as those behaviors have provided access to desired stimuli (e.g., getting attention) or allowed the students to escape or avoid undesired stimuli (e.g., difficult tasks). You can use operant conditioning to help your students increase valued and contextually appropriate behaviors and decrease contextually inappropriate behaviors in your classroom, as we discuss in Chapters 7 and 8, respectively.

Applied Behavior Analysis: Bringing the Science from the Lab to the Real World

Although Skinner discussed applications of his theory in "real-world" settings (e.g., Skinner, 1953, 1969), much of the early behavioral research took place in lab settings with animals, rather than humans. Thus, there was a need to bring the science and technology of behaviorism into the real world to solve applied problems (e.g., supporting student behavior in the classroom, enhancing performance of employees in an organization). In the initial volume of the *Journal of Applied Behavior Analysis*, Baer, Wolf, and Risley (1968) described the key dimensions of applied behavior analysis (ABA). ABA is an approach to addressing socially important (*applied*) problems by (1) implementing theoretically sound interventions (grounded in *conceptual sys-*

tems), described in replicable detail (*technological*), to alter observable and measurable actions of individuals (*behavioral*) and (2) demonstrating that the selected intervention is functionally related to the behavior change (*analytic*), producing change that is both meaningful (*effective*) and durable across contexts (*generality*). (The words in italics are the seven dimensions of ABA identified by Baer et al.) In schools, we often think of ABA as services for students with autism spectrum disorders, but ABA is a broad scientific approach that can be applied across a range of individuals and environments.

Other Influences on PBIS

Behaviorism and ABA provide a theoretical and empirical foundation for PBIS. In addition, movements within the disability and special education communities, including person-centered values and the normalization and inclusion movements, have also informed the broader field of positive behavioral support (Carr et al., 2002) and influenced PBIS—the application of positive behavioral support in schools and other organizations that serve students and youth. These influences are reflected in PBIS researchers and practitioners translating technical terminology into more user-friendly language; emphasizing local capacity and expertise, rather than maintaining an expert-driven model; and considering broader outcomes when determining effectiveness (e.g., quality of life across the lifespan, ecological validity; Carr et al., 2002). In a rudimentary way, you may think of PBIS as “ABA for the people.” It relies on the same science and theory, but PBIS is presented in a way that may be more accessible to families, educators, and school staff.

PHASES OF LEARNING

When we consider the implications of ABA and PBIS in instructional contexts, one of the key concepts is the phases of learning (Alberto et al., 2021; Cooper et al., 2021). There are four main phases of learning (acquisition, fluency, maintenance, and generalization), and the goal of instruction is to help learners progress through the phases to promote generalization of skills and knowledge (see Figure 1.4). In the next sections, we provide a brief introduction to each phase.

Acquisition

The first phase of learning is focused on the **acquisition** of new skills and concepts. When learners initially acquire a new skill or concept, they often make errors. Therefore, the goal of this phase of learning is *accurate* responding. For example, when students initially learn to read words, they often make errors in pronunciation, misapply phonetic “rules,” and make other mistakes related to decoding. Therefore, teachers initially work to assist students in becoming accurate with reading words. Similarly, when students initially learn to ask a peer to play, they may be awkward in their requests, engage in “silly” behavior (e.g., poking a peer) to get peer attention, or otherwise make social mistakes. The teacher’s goal should be to facilitate appropriate use of social skills.

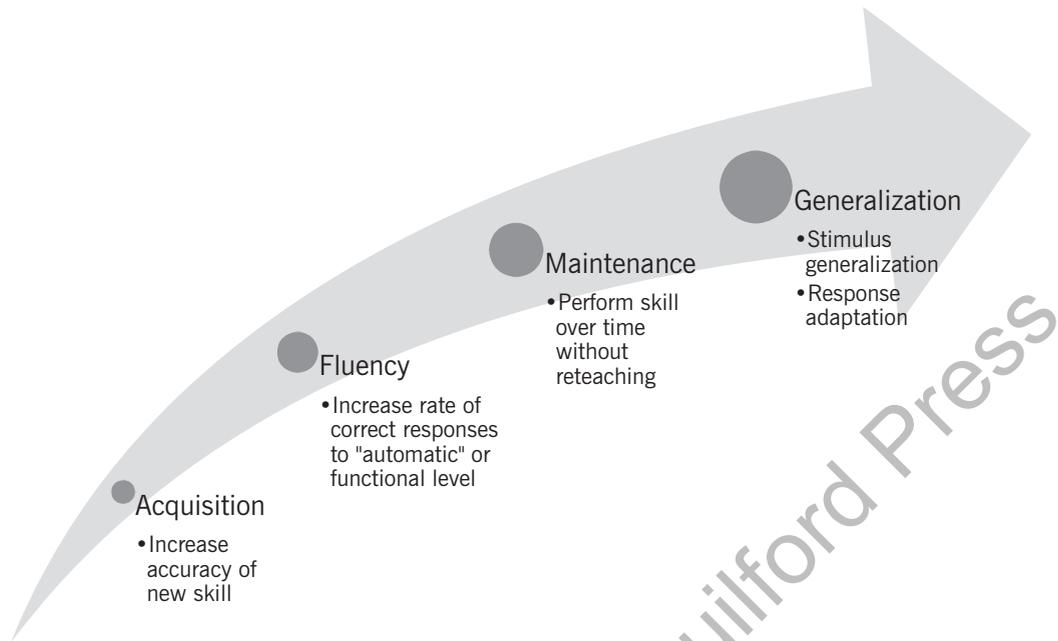


FIGURE 1.4. The goal of instruction is to move learners toward generalization of learned skills and concepts.

Fluency

Once a learner is accurate in responding, the next focus is on the **fluency**, or rate, of responding. Fluency is what makes a skill functional. If it took you 5 minutes to decode each word of this text, you might be an accurate reader, but reading would not be a functional skill. Therefore, the goal of fluency is attaining a rate of accurate responding that is age appropriate or functional. For example, once students have learned to accurately decode words, we shift our focus to the number of words read correctly per minute, or oral reading fluency. Similarly, we want students to demonstrate social skills at a rate that is age appropriate.

Maintenance

Once learners are fluent with a skill or concept, the goal is to have them **maintain** their use of that skill over time and without reteaching. One way to promote maintenance is repeated practice or “overlearning” (Alberto et al., 2021; Cooper et al., 2021). Math fact drills are a good example of this practice; the goal of these drills is **automaticity** (rapid responding that appears “automatic”). Most of us have had sufficient practice with math facts, and we can quickly respond to questions like “What’s $2 + 2$?” and “What is $4 * 5$?” without using our fingers and toes, manipulatives, or other strategies to determine a solution. In contrast, if some of us were asked to integrate a function, we may need to review our calculus text, watch a module on the Kahn Academy website (www.khanacademy.org), or call our favorite high school math teacher for a little reteaching. In other words, most of us have maintained our use of basic math, but some of

us have not maintained our use of advanced mathematical applications. As you think of other skills that you have not maintained, consider that *all* instruction should promote maintenance of skill and concept use so students can apply that knowledge over time without reteaching.

Generalization

The final phase of learning, and the ultimate goal of instruction, is **generalization**. In this phase, learners are able to both (1) apply the learned skill or concept in a range of appropriate contexts and (2) adjust their application as needed to meet the new context (a process also known as **adaptation**). For example, if we have taught students how to appropriately initiate and conclude a conversation with adults and peers, we would know that they had generalized this skill if they were able to perform the same skill with a range of “untrained” individuals (e.g., principal, future employer, police officer, younger sibling) and adjust their conversational discourse to appropriately interact with each person. There are various strategies to promote generalization (e.g., Stokes & Baer, 1977), including general case programming (Horner & Albin, 1988), which we will discuss in the next chapter.

As we have stated, the goal of instruction is to ensure that each skill and concept is acquired, performed fluently, maintained across time, and generalized across contexts. For the purposes of this text, we want to increase the likelihood that your learning of key skills and concepts progresses through the relevant phases of learning. To that end, we provide extension activities at the end of each chapter. For some skills and concepts, you may already have progressed through earlier stages of learning (e.g., you may already be fluent in using various consequence strategies to increase contextually appropriate behavior in your classroom), and it may be appropriate to skip those activities to focus on maintenance or generalization. For other skills or concepts, you may need to start at the beginning and work through all four sets of activities. We hope that these activities will help you move past basic acquisition (or comprehension) and toward generalized use of the skills and concepts in this text. In the next section, we provide an overview of the remaining chapters in this book.

OVERVIEW OF THE BOOK

This book provides an introduction to classwide PBIS. We believe this book may be used in a variety of ways, including:

- An applied text for an introductory course in classroom management or PBIS for preservice educators.
- A resource used by inservice teachers to enhance their own classroom practice.
- A guide for school- or district-level PBIS teams to use when providing professional development to staff (who may read a section a month and work on the described skill).
- A resource used by internal or external consultants when they work with an individual teacher who would like to improve their classroom implementation of PBIS.

Given the variety of potential uses, we believe this text will shape the dialogue in the field about how classroom practice can be enhanced with PBIS, what PBIS “looks like” in a

classroom, and how teachers can implement these strategies in a variety of school contexts (e.g., those that do and do not implement PBIS).

To that end, we give you a theoretical foundation (Chapter 2) to support the content in the remainder of the book, and we provide an overview of the essential elements of Tier 1 PBIS in your school (Chapter 3) and classroom (Chapter 4) in the remainder of Part I. Then we highlight empirically supported practices for classwide PBIS (Part II) and discuss how to implement them in your classroom (Chapters 5–8). Finally, we introduce strategies to support students who require Tier 2 (Chapter 9) or Tier 3 (Chapter 10) support to be successful in your classroom (Part III). The book ends with a discussion of resources and next steps (Chapter 11).

Part I. PBIS Foundations and Basic Principles

Chapter 2. Behavioral Principles at Work in PBIS

In Chapter 2, we provide a brief primer on the behavioral principles that underlie PBIS. In particular, we discuss the ABCs of behavior, or the three-term contingency. We introduce the concept of setting events and describe how they interact with the other elements of the three-term contingency. We also highlight behavioral approaches to teaching new skills (shaping and chaining) and increasing the likelihood that previously learned behaviors occur in the desired situations (establishing stimulus control).

Chapter 3. Tier 1 Schoolwide PBIS

Chapter 3 is an overview of Tier 1 schoolwide PBIS. We present the defining characteristics of schoolwide PBIS, describe the essential elements (equity, outcomes, data, practices, and systems) in greater depth using schoolwide examples, and highlight how to connect schoolwide PBIS with your own classroom PBIS approach.

Chapter 4. Introduction to Classwide PBIS: Focus on Equity, Outcomes, Data, and Systems

In this chapter, we describe how to apply the essential elements of PBIS in your classroom. Because we discuss classroom practices in Chapters 5–8, Chapter 4 focuses primarily on centering equity, selecting outcomes, collecting and using data to guide your practice, and identifying systems to support your classroom implementation of PBIS.

Part II. Classwide PBIS Practices

Chapter 5. Create an Inclusive, Predictable, Safe, and Engaging Classroom

In Chapter 5, we share strategies for creating an inclusive, predictable, and safe classroom environment by (1) connecting and fostering positive relationships with and among your students, (2) establishing and teaching classroom routines, and (3) arranging your classroom environment in a way that promotes access and contextually appropriate behavior. We also discuss strategies

to actively engage your students in relevant instruction, as high-quality instruction is one of the most effective social, emotional, and behavioral support tools!

Chapter 6. Establish and Teach Positively Stated Norms or Expectations

After considering the structure and instruction in your classroom, it is critical to engage your students in selecting, defining, explicitly teaching, monitoring, and reinforcing a small number of positively stated norms or expectations to foster a positive classroom community. This chapter is all about expectations, including a focus on designing and delivering classroom social skills lessons that assist students with acquiring, gaining fluency with, maintaining, and generalizing social, emotional, and behavioral skills (i.e., contextually appropriate behavior) across contexts.

Chapter 7. Implement a Continuum of Strategies to Increase Contextually Appropriate Behavior

In Chapter 7, we teach you to apply the basic principle of reinforcement to increase students' social, emotional, and behavioral skills (i.e., contextually appropriate behaviors) in your classroom. We present a variety of empirically supported reinforcement strategies, describe how to engage your students in designing an appropriate system for your classroom, and discuss how to implement and evaluate your classroom reinforcement system.

Chapter 8. Implement a Continuum of Strategies to Decrease Contextually Inappropriate Behavior

Chapter 8 is the companion to Chapter 7, as we teach you strategies to supportively respond to and decrease social, emotional, and behavioral mistakes, or contextually inappropriate behaviors, in your classroom. Although we discuss strategies that use the behavioral mechanism of punishment (i.e., error correction, overcorrection, response cost, time out from reinforcement), we also (1) highlight strategies designed to strengthen contextually appropriate behaviors to decrease contextually inappropriate behavior (e.g., differential reinforcement), (2) describe a restorative approach, and (3) generally emphasize a supportive and instructional approach that aims to set students up for success and prevent social, emotional, and behavioral mistakes.

Part III. Additional Tiers of Support for Students

Chapter 9. Overview of Tier 2 Support in Your School and Classroom

In Chapter 9, we introduce you to the critical features of Tier 2 support and describe how it can be applied in your school and classroom. We begin by discussing how you can further differentiate your classroom practices (described in Part II) to meet the needs of students who require an additional layer of support. We also review a variety of empirically supported Tier 2 interventions and discuss how they can be used to support a range of student needs in your classroom.

Chapter 10. Overview of Tier 3 Support in Your School and Classroom

We introduce Tier 3 support in Chapter 10, including individualized BSPs based on FBAs and more intensive supports developed through wraparound and person-centered planning processes. We highlight what this may look like within your classroom, and how you may participate in developing and implementing FBAs and BSPs for your students (along with a whole team to support you!).

SUMMARY

Schools and teachers implementing PBIS center equity; identify relevant and meaningful outcomes for implementation; use data to guide decisions and evaluate progress toward outcomes; organize, adopt, and implement evidence-based and culturally responsive practices within a preventive framework; and invest in systems to sustain fidelity of implementation over time. PBIS is grounded in the early science and theory of behaviorism and in more recent applications of ABA. One of the key dimensions of ABA is generality; in an instructional context, this means that our goal is to promote the acquisition, fluency, maintenance, and ultimately generalization of learned skills and concepts. We continue to “unpack” behavioral principles that are foundational to PBIS in Chapter 2.

PHASES OF LEARNING ACTIVITIES: CHAPTER 1

Acquisition

1. Identify examples of respondent and operant conditioning that affect students' behavior in your classroom.
2. Write a definition of PBIS that references the three tiers of support and the five essential elements (equity, outcomes, data, practices, and systems).

Fluency

1. Select a contextually appropriate behavior that you would like to increase for students in your classroom, identify a potentially meaningful reinforcer to provide when the students engage in that behavior, and use operant conditioning to systematically reinforce students' use of that behavior.
2. Briefly describe PBIS to a colleague in your school environment and check for their understanding to evaluate the quality of your description.

Maintenance

1. Once the behavior you targeted in Fluency Activity 1 reaches the desired level, select a new classroom behavior you would like to increase or a new group of students (if you see multiple groups of students throughout the day) and repeat the same process.
2. Review descriptions of PBIS found in resources listed in this book and on the web (e.g., www.pbis.org). Determine whether your understanding matches those descriptions, and continue to refine your own descriptions by discussing PBIS with colleagues.

Generalization

1. Use operant conditioning to systematically reinforce one of your own behaviors. That is, identify a behavior you want to increase, identify a reinforcer, and only give yourself access to that reinforcer when you have engaged in the desired behavior.
2. Develop a plan for implementing PBIS within your classroom. (You may need to finish reading this book first!) Consider practices you will implement for all of your students (Tier 1) and supports that you may provide to targeted groups (Tier 2). Consult with a behavioral expert in your school to identify supports for individual students who display chronic or high-risk behavior in your classroom (Tier 3).