

## CHAPTER ONE

# Introduction

Some teachers reading this book might find this hard to believe, but education in this country has never been better. More students attend school to completion than ever before, instruction in all states is now directed by challenging content standards in the core academic subjects, schools are systematically using data to drive instruction and intervention efforts, teachers frequently function within high-performing teams that focus on improving student outcomes, and technology has become a common tool to enhance student learning in many schools, and in many cases it is working! Scores on the National Assessment of Educational Progress (NAEP) have consistently gone up over the past 25 years for all students and for students from every ethnicity group. The gap between white and black students in reading and mathematics has gone down substantially, but it still exists, and reducing it further has become a national priority. The graduation rate in this country has reached an all-time high of 81%. The data clearly indicate that teachers, administrators, school psychologists, school counselors, and other educational professionals should be proud of their profession and the positive impact they have on children and youth.

Despite the preponderance of effective practices and positive outcomes in most states, every teacher and school-based professional reading this book can easily identify students who are not achieving success:

Tom, the third grader who seems so good at mathematics but almost refuses to read and write.

Wayne, the fifth grader with a positive attitude who tries so hard but just does not remember what he learned yesterday.

Tina, the sixth grader who tells you that she “hates math.”

Greg, the eighth grader who will not sit still in class.

Jim, the tenth grader who seems to have given up entirely and who everyone is sure has started experimenting with drugs.

Each of these students has two things in common. First, every teacher, school psychologist, counselor, and speech and language pathologist sees potential in each of these students. Second, school-based personnel are frustrated that they cannot do more to help them.

The last few decades have also seen a dramatic rise in the diversity and intensity of student needs, coupled with greater demands for accountability and a school curriculum linking

student performance to high-stakes testing. America's classrooms are now home to a highly diverse student population in terms of achievement levels, ethnic and linguistic backgrounds, socioeconomic status (SES), and disability status, including an increasing number of students from families living below the poverty level and/or from homes in which English is not the primary language. In 2012, the percentage of white students in public K–12 schools fell below 50% for the first time in this country's history, and almost 10% of children and youth in public schools do not speak English as the first language (National Center for Education Statistics [NCES], 2015).

Federal legislation, such as the No Child Left Behind Act (NCLB) and its successor, the Every Student Succeeds Act (ESSA), mandated scientifically validated practices in schools. At the same time, there has been a growing recognition of the critical influence of school experiences on children's long-term outcomes, especially for children from high-poverty and diverse backgrounds (Hamre & Pianta, 2001; Klingner & Artiles, 2006; Rimm-Kaufman, Fan, Chiu, & You, 2007). To meet these challenges, education professionals will need expertise in helping teachers create classroom environments that promote academic productivity and appropriate social behavior for an increasingly diverse student population. In particular, they will need information about a broad range of strategies that are not only effective in enhancing outcomes for individual students but that can also be applied on a group basis to help all the students in a classroom become successful learners. Education professionals will also need information about the evidence-based-practice approach to intervention, which is the process of designing, implementing, and evaluating interventions, regardless of whether that process is implemented by an individual or within a team-based framework.

### THE EVIDENCE-BASED-INTERVENTION AND -PRACTICE MOVEMENT

In the not-too-distant past, education professionals tended to rely on interventions based primarily on familiarity, but schools are now mandated to use evidence-based practices according to ESSA. There have also been numerous calls in the field urging school psychologists to implement evidence-based strategies and practices at the classroom and building levels to assist students with learning and behavioral problems (e.g., Forman et al., 2013; Kratochwill & Shernoff, 2004; Kratochwill & Stoiber, 2000; Stoiber & Kratochwill, 2000). In 1998, Division 16 of the American Psychological Association and the Society for the Study of School Psychology collaborated to form the Task Force on Evidence-Based Interventions in School Psychology with the mission of bridging the research-to-practice gap by identifying prevention and intervention programs, using rigorous criteria to review them, and providing ratings reflecting that review (Kratochwill & Stoiber, 2000; Stoiber & Kratochwill, 2000); Division 16 later formed the Working Group on Translating Science to Practice (Forman et al., 2013). In a related effort, the Institute of Education Sciences (IES) at the U.S. Department of Education established the What Works Clearing House ([www.whatworks.org](http://www.whatworks.org)) in 2002 to develop standards for reviewing and synthesizing educational research and to provide educators, policymakers, researchers, and the public with a central independent source of scientific evidence of effective educational interventions.

*Evidence-based interventions* (EBIs) are strategies, practices, and programs with available research documenting their effectiveness and data suggesting that they are enhancing student outcomes. ESSA refers on numerous occasions to evidence-based practices, but it offers no specific definition as to what constitutes an evidence-based intervention or practice. The act does define what represents strong evidence, which includes at least one randomized experimental study, and moderate evidence, which includes a quasi-experimental study.

## Intervention Assistance Teams and EBIs

Although EBIs have been a popular concept of late, they are not new. Many of the current ideas in EBI can be linked back to the early consultation literature (Bergan & Kratochwill, 1990) or data-based program modification (DBPM; Deno & Mirkin, 1977). Many schools implemented consultation-based approaches to identifying EBIs such as DBPM through an intervention assistance team (IAT), which was a multidisciplinary collaboration to identify, analyze, and suggest interventions in order to increase teacher effectiveness and support students experiencing difficulties (Graden, Casey, & Christenson, 1985). Federal special education guidelines required interventions before students could be referred for an evaluation to identify a disability, but they did not outline what that prereferral should entail. Thus, many schools implemented IATs but did so in a wide variety of ways across and within states. As Buck, Polloway, Smith-Thomas, and Cook (2003) observed, “pre-referral is one of the most inconsistently applied processes in education” (p. 350). Meta-analytic research found large effects for IATs, but differences in effectiveness were found and attributed to the implementation integrity of those teams (Burns & Symington, 2002). Moreover, the only direct assessment of the effect that implementation of a prereferral IAT process had on student outcomes was conducted with the Pennsylvania Instructional Support Team model (Kovaleski, Tucker, & Stevens, 1996), which found that teams with high implementation had stronger outcomes and that low implementation led to outcomes similar to those of a control group (Kovaleski, Gickling, Morrow, & Swank, 1999).

In addition to implementation integrity, IATs experienced several other difficulties. First, the interventions provided by IATs were often simplistic and low quality (Flugum & Reschly, 1994; Telzrow, McNamara, & Hollinger, 2000). Rather than targeting the classroom environment and making recommendations that required teachers to make substantive changes in their instructional or behavior management practices, IATs tended to emphasize recommendations that focused on factors outside of the classroom, such as counseling and after-school tutoring (McNamara & Hollinger, 2003; Meyers, Valentino, Meyers, Boretti, & Brent, 1996).

Second, IATs were often unable to assist teachers in solving the referral problem, especially in the case of students with behavioral difficulties. Teams rarely considered the function of ineffective behavior or the influence of classroom environmental factors on student behavior and tended to select punitive and exclusionary strategies rather than strategies that helped students learn acceptable replacement behaviors (Scott et al., 2005). Under these circumstances, the likelihood of a successful outcome was greatly diminished.

Third, teachers often made little or no effort to implement team recommendations, especially at the secondary level (Rubinson, 2002). As Sindelar, Griffin, Smith, and Watanabe (1992) aptly observed, “Regardless of the quality of the plan that the team develops, its implementation by the classroom teacher remains the most crucial step of the process” (p. 255). Teachers’ failure to implement recommendations was related to the frequent failure by teams to provide adequate follow-up and support to teachers after recommending interventions (Bahr, Whitten, Dieker, Kocarek, & Manson, 1999; Doll et al., 2005), as well as to teachers’ perception that teams ignore or devalue their input during the problem-solving process (Slonski-Fowler & Truscott, 2004).

Fourth, IATs often failed to implement a systematic data collection and progress monitoring system to generate information for problem solving or to assess intervention effectiveness (Truscott, Cosgrove, Meyers, & Eidle-Barkman, 2000). Teams typically devoted too little time to gathering and reviewing information to help define problems and moved too rapidly to discussing intervention alternatives (Meyers et al., 1996). Once interventions had been implemented, teams and teachers alike often failed to employ objective evaluation

procedures to determine whether the intervention had been implemented as planned (i.e., to assess treatment integrity) or to assess changes in student performance (Bahr et al., 1999; Flugum & Reschly, 1994; Meyers et al., 1996). Even when some form of follow-up was provided, teams seldom used direct measures of student outcomes, such as curriculum-based assessments or classroom behavioral observations. Instead, teams typically relied on verbal contacts for follow-up and teacher judgment for evaluating intervention effectiveness (Bahr et al., 1999; Truscott et al., 2000). Data-based evaluation methods, such as graphing intervention results, comparing pre- and postintervention data, and conducting systematic classroom observations, were rarely used (Bahr et al., 1999). Without collecting and analyzing data to document intervention effects, however, consultants and teachers cannot determine which, if any, strategies result in improved student performance.

Fifth, there was a lack of knowledge of EBIs and effective problem-solving processes by team members. Over 90% of school psychologists who responded to a survey indicated a need for more training in interventions (Nelson & Machek, 2007), and a large majority of special education teachers reported that they continued to use interventions for which there was a questionable research base (Burns & Ysseldyke, 2009). Similarly, despite evidence that students who are referred to teams that include special educators are significantly less likely to be retained or referred for special education evaluations (Burns, 1999), educational specialists, such as reading teachers or speech–language pathologists, are often not included on teams, limiting teams’ ability to design effective interventions, especially strategies targeting academic performance (Slonski-Fowler & Truscott, 2004; Truscott et al., 2000).

Finally, the IAT process was not contextualized within a larger intervention framework and often operated independently of instructional practice. Consider a school with 500 students. On average, 20% of students need additional support despite effective instructional practices (Burns, Appleton, & Stehouwer, 2005), which suggests that in a school of 500 students, 100 of them will need additional support. Many schools would attempt to meet and conduct an IAT for 100 students. Needless to say, there cannot be an effective intervention process when schools are gathering five to eight professionals, collecting all relevant data about students, engaging in in-depth analyses, and selecting research-based interventions that address the underlying function of behavior for 100 students. First, schools need a systemic approach that addresses the needs of most of these 100 students, leaving only approximately 5% (25 in our fictitious school of 500). Second, school personnel should examine the core instruction and classwide disciplinary practices to make sure that they are research based and implemented with fidelity. Thus effective team intervention has to be more systematic and systemic.

### **Multi-Tiered Systems of Support and EBIs**

The Individuals with Disabilities Education Improvement Act (IDEIA, 2004) incorporated a system intervention-oriented approach to service delivery by focusing on intervention services rather than on traditional assessments to identify students’ needs and to monitor progress. IDEIA permits local education agencies to use up to 15% of federal funds for early intervening services for students in grades K–12, with a special focus on students in grades K–3 who have not been identified as needing special education or related services but who require additional academic and behavioral support to succeed in a general education environment (20 U.S.C. § 1413[f][1]). In addition, IDEIA permits local education agencies to identify children with specific learning disabilities by means of a process that measures response to scientific, research-based interventions as a substitute for or supplement to ability–achievement discrepancy models of eligibility determination (20 U.S.C. 1414 [b][6]; 34

C.F.R. 300.307[a][2]). Although the term is not specifically used in IDEIA, this process is referred to as *response to intervention* (RTI).

RTI is a proactive approach designed to identify students with academic or behavioral difficulties as soon as they begin to struggle (Yell, Shriver, & Katsiyannis, 2006). In RTI models, students receive evidence-based instructional practices and interventions, with the level of service matched to their level of need and frequent monitoring to determine response. Progress monitoring results are used to make decisions about the need for additional interventions or levels and types of services in general and/or special education. Although there are several variations of the RTI approach, they all have several components in common: (1) the use of increasingly intensive levels (“tiers”) of intervention, (2) a reliance on research-based instruction and interventions, (3) a problem-solving approach for matching interventions to student needs and making educational decisions, and (4) systematic data collection and monitoring to determine whether students are making sufficient progress.

RTI is most often implemented within a multi-tiered system of support (MTSS), which uses a three-tiered model to address academic and behavioral difficulties. Data are used to analyze problems at three levels within an MTSS, which then directs interventions. Tier 1 of a three-tiered MTSS consists of universal screening, quality core instruction, and effective behavior management for all students in the general education program. Students who fail to make adequate progress in Tier 1 receive a second level of support in Tier 2 that is often delivered in small-group settings, in addition to the regular classroom practices. Students for whom the Tier 2 intervention was not effective are then usually referred for Tier 3 services, which often involve bringing in a problem-solving team. Interventions delivered at Tier 3 are often intensive and delivered in a one-on-one or one-on-two format.

Although there are multiple intervention components that differentiate Tier 1 from Tier 2 and Tier 2 from Tier 3, the level of problem analysis needed to identify the appropriate intervention is likely the essential attribute of each tier. Students receiving a Tier 3 intervention usually do so in a one-on-one format, but it is not unusual to group two or three students together who are getting the same intervention within Tier 3. It is also not unusual to deliver an intervention within Tier 2 to an individual student or a group of two. However, Tier 1 analysis at Tier 2 will reduce intervention effectiveness, and Tier 3 level of analysis is not sustainable for Tiers 1 or 2. We discuss problem analysis across the tiers next.

## **Problem Analysis**

One of the primary reasons that IAT models were not effective was that the IATs did not engage in appropriate problem analysis. As we have discussed elsewhere (e.g., Burns & Gibbons, 2013; Burns, Riley-Tillman, & VanDerHeyden, 2012), there are specific problem-analysis questions that can guide school personnel decisions at each tier. The primary problem-analysis question addressed at Tier 1 is, “Is there a classwide need?” Data are used to determine whether the student difficulties are the result of systemic issues that require changes in core instruction. The primary problem-analysis question at Tier 2 is, “What is the category of the problem?” Data are collected at Tier 2 to determine the broad area of deficit for individual students. For example, does the student lack decoding skills? Is the student motivated by positive attention from an adult? Does the student know the basic multiplication facts? Data suggest the category of the deficit, and students are grouped based on the data in order to receive interventions that target that deficit. Finally, the primary problem-analysis question for Tier 3 is, “What is the causal/functional variable?” Analyses at Tier 3 are often quite complex and may examine variables such as using more errorless and salient stimuli to support initial acquisition, increased repetition to support retention, and others, and they are often identified through a brief experimental analysis of student behavior.

It would go beyond the scope of this chapter to adequately discuss how to use data to answer the three questions above. Generally speaking, questions about classwide needs are addressed by examining universal screening data. For example, if a school used curriculum-based measures of reading (CBM-R) as a seasonal benchmark assessment, then school personnel would compute the median score for each classroom and compare it with the seasonal benchmark. If the median is below the criterion, then there is a classwide need, and an intervention is implemented. Previous research has consistently shown that providing classwide interventions has led to significant student growth in reading (Burns, Pulles, Helman, & McComas, 2016; Burns et al., 2015; Mathes, Howard, Allen, & Fuchs, 1998) and mathematics (VanDerHeyden & Burns, 2005; VanDerHeyden, McLaughlin, Algina, & Snyder, 2012). Categorical decisions are made with assessments of individual skills such as decoding, reading fluency, comprehension, multiplication, and functional assessments of behavior difficulties. Those data are then used to target intervention decisions. Finally, data used to analyze problems within Tier 3 could come from any number of assessments but should be a multidimensional, direct measure of the problem that is repeatable in order to document change (Hosp, 2008). Examining the types of data described here would likely improve decisions made by school-based teams.

### **Professional Learning Communities or Problem-Solving Teams?**

As stated above, one of the difficulties with IATs was that they were not contextualized within a larger intervention framework and often operated independently of instructional practice. Many schools currently use problem-solving teams (PSTs) as an extension of the IAT concept in which professionals from different disciplines meet to systematically analyze data to suggest interventions for individual students. The PST process is often more systematic than its predecessors but still is not well contextualized within a broader system. Moreover, given that questions raised within an MTSS often address classroom practices and building policies, classroom teachers should be involved in the decisions.

Professional learning communities (PLCs) are groups of teachers and school personnel who collaborate to enhance learning for students (DuFour, Eaker, & DuFour, 2005). Effective PLCs work collectively toward shared goals, implement best practice for student achievement, and utilize a cycle of inquiry to promote continuing improvement (DuFour & Eaker, 1998). Effective MTSS implementation is usually guided by an effective PLC. For example, PLCs should be the groups examining screening data to identify classwide interventions and students who need additional support, using additional diagnostic data to target Tier 2 interventions, and reviewing measures of student progress to determine whether students are adequately improving with intervention. Having the PLC involved in these decisions links classroom teachers and supplemental supports, core instruction and intervention, and student outcomes and MTSS implementation.

The school's PST or IAT enters the MTSS process at Tier 3. An effective IAT model or PST will always be a component of an effective intervention framework, but that is a resource that should be reserved for students with the most intense needs. Consider a school with 750 students. In all likelihood, probably at least 150 (20%) of the students in the school will need additional support. Imagine trying to convene a PST to talk about 150 students in one school year! If the team met each week and talked about 2 students each time, that would be a total of approximately 70 students. A strong Tier 1 intervention and Tier 2 framework are likely needed to get that number down to 35 to 40 students, which is a number that would enable much more successful intervention efforts by a PST.

Unfortunately, many teachers do not have the prerequisite skill to successfully function within a PLC or PST, and many PLCs struggle to identify common assessments, criteria

with which to judge student proficiency, and a process to collaboratively analyze data and improve student learning (DuFour et al., 2005; Love, 2009). Therefore, data analysis within a PLC needs to be systematic and examined with specific guiding protocols. Moreover, members of PLCs and PSTs need to be knowledgeable about what makes an intervention effective and how to select appropriate interventions. We discuss these points next.

## WHAT MAKES A GOOD INTERVENTION?

The interventions included in this text were located by searching online databases, peer-reviewed journals, and books in the consultation, behavioral sciences, and teacher effectiveness literatures. The strategies have been adapted from the original sources as needed to facilitate implementation in general education settings. In cases in which an intervention has been modified and validated in one or more subsequent studies, two or more sources have been cited, and the most effective and practical features of each version have been retained. In several cases, the components evaluated in two or more studies have been combined to create a single intervention (e.g., *Delivering Effective Reprimands; Delivering Effective Commands: The Precision Request Program*). The eight criteria used to select interventions for inclusion in this book are described here.

### Criterion 1: Documented Evidence of Effectiveness

Only interventions with empirical evidence of effectiveness in improving the behaviors they were designed to address were considered for inclusion. In analyzing experimental and quasi-experimental research to determine which interventions are effective, researchers commonly use the method of meta-analysis. In a meta-analysis, the results from each study are converted into a common unit of measurement called an effect size (ES) that expresses the difference in outcomes between the experimental (intervention) group and the control (nonintervention) group in standard deviation units. The results of several studies evaluating the same intervention or instructional practice can then be combined to determine the average effect of that strategy. A positive ES indicates that the intervention groups outperformed the control groups, whereas a negative ES indicates that the intervention groups performed less well than the comparison groups. In addition to determining the average overall ES for an intervention, researchers can use statistical analyses to determine whether greater ESs are associated with various characteristics of the students receiving the intervention (e.g., grade, initial vocabulary skills, behavior) and/or various forms or intensities of the intervention (e.g., researcher- vs. teacher-delivered, less vs. more intensive, individual vs. small-group format).

In the most common method of deriving ES, termed  $d$ , the mean of the control group is subtracted from the mean of the experimental group. The mean difference between groups is then divided by the pooled (average) standard deviation ( $SD$ ) of the two groups ( $[SD_1 + SD_2]/2$ ) to obtain a common  $SD$  that represents the difference between the measurements. The actual formula uses the square root of the average variance for the two studies (variance equals the  $SD$  squared), but the  $SD$  works well for most studies. For example, an ES of 0.50 means that students in the experimental group scored, on average, one-half of an  $SD$  higher on the outcome measure than did students in the control group (Cooper, Valentine, & Charlton, 2000).

Cohen's (1988) guidelines are commonly used to interpret effect size, with an ES of 0.20 indicating a small or mild effect, an ES of 0.50 indicating a medium or moderate effect, and an ES of 0.80 indicating a large or strong effect. According to the What Works Clearinghouse Intervention Rating Scheme ([www.whatworks.ed.gov/reviewprocess/essig.pdf](http://www.whatworks.ed.gov/reviewprocess/essig.pdf)), a minimum

ES of 0.25 is the smallest positive value at which the effect is “substantively important.” ESs can also be translated into percentile gains for use in interpreting the impact of an intervention. For example, an ES of 0.25 represents a percentile gain of 10 points for the average student in the intervention group, meaning that the typical treated student scored higher than 60% of untreated students. An ES of 0.80 (large effect) indicates that the typical student in the intervention group scored higher than 79% of untreated students.

Interventions included in this book either were included in meta-analytic research and had strong effects or had multiple studies that demonstrated effectiveness. The original source had to include some systematic, objective method of documenting observable changes in student performance. Many studies employed single-subject designs, such as A-B-A-B, withdrawal, reversal, alternating treatments, or multiple baseline methods, that used data from observations of classroom behavior; or academic measures, such as percent-correct scores on classroom tasks. A sizable number of the interventions have been validated across different grades, academic subjects, settings (e.g., resource room, inclusive classroom, general education classroom), formats (e.g., individual, small-group, whole-class), and student populations (students without identified disabilities, students with disabilities, English language learners, etc.), providing additional evidence of their effectiveness in improving student outcomes.

### **Criterion 2: Consistent with an Ecological Perspective**

Focusing on internal deficits in the child as the sole cause of a student’s school problems provides little information or direction for designing school-based interventions. In contrast, an ecological approach views student problems as arising not only from child characteristics but also from mismatches between student needs and environmental variables, including classroom management and instructional practices. Adopting an ecological perspective to academic and behavior problems not only expands the analysis of factors that may be contributing to those problems but also yields a broader range of targets for school-based interventions (Barnett, Bell, & Carey, 2002; Truscott et al., 2000). Also in keeping with an ecological perspective, the interventions are designed to be minimally intrusive so that they can be implemented in general classroom settings without singling out individual students or unduly disrupting teachers’ typical instructional and behavior management systems. Interventions that require major alterations in classroom ecologies are unlikely to become integrated into teachers’ routines or to have the desired effects on student performance (Elliott, Witt, Kratochwill, & Stoiber, 2002; Lentz, Allen, & Ehrhardt, 1996). Several interventions designed for parent delivery are also included, but these too require minimal training and supervision by school personnel and minimal alterations in family routines.

### **Criterion 3: Alignment with the Function of the Problem (Causal Variable)**

Interventions also had to align with the function of the problem, which we refer to as the *causal variable*. In other words, we avoid comprehensive interventions in favor of those that target specific problems. Our research (e.g., Burns et al., 2016) has consistently shown that it is preferable to use data to select interventions based on student need than to deliver a comprehensive intervention. Many people reading this book could likely identify a student for whom they attempted a research-based intervention that had worked well for a previous student but did not work well for the current student. The reason that happens is often that the intervention does not address the correct problem for the student. Using repeated reading will likely result in positive outcomes for a student who struggles with reading fluency, but



the results will be much more disappointing if the student struggles to decode words or does not have adequate phonemic awareness.

In addition to matching the skill area, interventions should match the phase of learning. Haring and Eaton (1978) outlined a learning hierarchy through which skills progress as they are learned. People start in the acquisition phase, in which performance is slow and inaccurate and instructional efforts should focus on modeling, explicit instruction, and immediate feedback on accuracy. Once the student can perform the task with sufficient accuracy (probably around 90%), then he or she moves to the proficiency phase, which is accurate but slow performance and in which instruction should focus on increasing the speed with which the student completes the task. Some might question whether the speed with which a task is completed really matters, but according to learning hierarchy, it does, because performing the task with sufficiency and accuracy and speed enhances the student's ability to generalize the skill. Generalization does not occur unless the skill is automatized, but a student must first be accurate and then demonstrate sufficient speed. Students in the generalization phase can demonstrate the skill in different contexts. Lastly, once a student can generalize the skill, then he or she can modify it to solve problems in novel situations. An intervention should be designed to teach the skill initially (through modeling, explicit instruction, and corrective feedback) for students in the acquisition phase, *or* to build proficiency (through repeated practice and feedback on speed), *or* to enhance generalization. There is considerable research that demonstrates the effectiveness of matching the instructional task to the phase of the student (Burns, Coddling, Boice, & Lukito, 2010; Chafouleas, Martens, Dobson, Weinstein, & Gardner, 2004).

#### **Criterion 4: Emphasis on a Proactive Approach to the Problem**

Priority has been placed on strategies that help teachers create learning environments that prevent problem behavior from occurring rather than on strategies that are applied after problem behavior has already occurred. Many of the classroom interventions that have appeared in the literature are *contingency-based*, that is, they involve manipulating *consequences* to shape behavior. In contrast, proactive strategies emphasize manipulating *antecedents*, that is, modifying the classroom environment to promote high levels of student engagement and thus prevent academic failure and disruptive behavior.

#### **Criterion 5: Capable of Classwide Application**

Traditional intervention assistance approaches directed at a single low-performing or ineffectively behaving student are of limited utility in helping teachers become more effective instructional managers or behavioral problem solvers. On the contrary, given the growing needs and diversity of the student population and federal mandates for improving outcomes for all students, teachers need strategies that can enhance the academic performance and social competence of all of the students in a classroom. Moreover, when a teacher refers an individual student because of some learning or behavior problem, consultants often discover that the problem extends beyond the referred child to several students or to the class as a whole. Although the teacher is focusing on one student, the referred child's dysfunctional behavior is embedded within an ineffective organizational, instructional, or behavior management system that is interfering with the optimal performance of several or all of the students in that classroom. In keeping with this universal perspective, interventions have been selected that were either originally designed to be implemented on a classwide basis or that could be readily adapted to that format while at the same time accommodating students with special needs within that group.

This edition also includes several behavioral interventions that were originally designed to be implemented on a schoolwide basis. Schoolwide interventions are increasingly being used to improve behavior and social competence for an entire student body and are especially valuable in targeting problem behaviors that occur in nonclassroom settings, such as hallways, cafeterias, and the playground (Sugai, Horner, & Gresham, 2002).

### **Criterion 6: Capable of Being Easily Taught through a Consultation Format**

Interventions that place high demands on consultant or teacher time to ensure accurate implementation are unlikely to find their way into consultants' repertoires or teachers' routines, regardless of their documented effectiveness in solving the target problem (Boardman, Argüelles, Vaughn, Hughes, & Klingner, 2005; Gersten, Chard, & Baker, 2000). For this reason, only interventions that can be easily taught to educators in individual or group-oriented consultative settings have been included. Similarly, strategies with complex implementation or evaluation procedures as presented in the original sources have been modified to increase their practicality and to facilitate a high degree of treatment integrity. The standardized format used for all of the assessments and interventions in this book has been designed specifically for use in consultation settings, including consultant–teacher sessions and professional development programs. Strategies that were judged to be so complex that modifications to accommodate the realities of the regular classroom would have reduced intervention effectiveness were excluded from consideration.

### **Criterion 7: Capable of Implementation Using Regular Classroom Resources**

This criterion reflects the goal of enhancing the capacity of general education teachers to meet the needs of diverse learners rather than relying on special education programming. All the interventions in this book can be delivered using resources that are already present in the typical classroom or can be prepared or obtained with minimal cost and effort. Interventions have been selected that capitalize on the human and material resources already present in general education settings, including teachers, peers, the regular curriculum, and typically available classroom resources. Strategies requiring substantial additional human or material resources, such as extra staff, special services personnel, supplementary curricular materials, and special equipment, or that require the removal of students from the regular classroom, were either modified or excluded from consideration. This eliminated individual and small-group social skills training or counseling programs, as well as the ever-increasing array of commercially published curricula targeting academic performance or social competence. For similar reasons, most interventions with a home-based component had to be excluded. Although numerous strategies involving parents as intervention agents have appeared in the literature, the majority require a substantial investment of teacher, consultant, and/or parent time for accurate implementation, target a single student or a small group, and even then sometimes fail to achieve meaningful changes in student achievement or behavior (e.g., Callahan, Rademacher, & Hildreth, 1998; Kahle & Kelley, 1994). Here, only the simplest school–home interventions that require minimal parent training and teacher or consultant involvement and that can be applied to an entire classroom group have been selected.

### **Criterion 8: Capable of Being Evaluated by Reliable, Valid, and Practical Methods**

Consistent with the evidence-based intervention movement, federal mandates, and ethical practice (American Psychological Association [APA], 2010; National Association of School

Psychologists [NASP], 2010), the interventions in this book target concrete, observable student behaviors that can be objectively measured over time. In addition to the evaluation procedures described in Chapter 2 and the curriculum-based measurement (CBM) procedures presented in Chapter 4, each intervention includes at least two and as many as four methods of gathering information on preintervention performance and evaluating performance changes subsequent to intervention. Observational and evaluation measures are designed to be as practical as possible so that they can be easily implemented by regular classroom teachers, consultants, or other school personnel. Although efforts have been made to match the methodology of the original sources, evaluation procedures have been modified for many interventions to accommodate the exigencies of the regular classroom setting and to approximate more closely the typical data collection methods of classroom teachers and school-based consultants. Moreover, because many of the interventions originally targeted only one student or a small group of students, observational and evaluation methods suitable for classwide application have been substituted for or added to the original individually focused procedures.

## ETHICS FOR INTERVENTION EFFORTS

Careful attention to legal and ethical issues relative to selecting, implementing, and evaluating interventions is a key component of the intervention assistance process. Practitioners must ensure that the interventions they recommend through IATs, case-centered consultation, professional development, and other forms of service delivery are aligned with federal and state laws and regulations, district guidelines, and the ethical principles and practice standards of professional groups, including the APA (2010) and NASP (2010). The major issues in this area include (1) intervention targets, (2) intervention effectiveness, (3) possible undesirable side effects and outcomes, (4) parent involvement, (5) student involvement, (6) documentation, (7) evaluation, (8) consultant competence, and (9) provisions for referral for additional services if interventions are unsuccessful.

### Intervention Targets

Ethical practice mandates that interventions focus on enhancing academic and social competencies rather than on reducing unwanted behavior, or what Conoley and Conoley (1992) have termed “dead-person targets”—that is, behaviors best performed by dead people, such as sitting still and being quiet. Moreover, an ecological perspective requires that intervention targets include not only student behaviors but also environmental variables that may be influencing student performance. The sequence of interventions in this book—beginning with strategies targeting the classroom environment, followed by interventions designed to enhance academic performance and, finally, interventions designed to reduce inappropriate behavior and improve social competence—is intended to emphasize the order in which targets should be considered. One promising approach to intervention target selection is to focus on *keystone behaviors* (Barnett, Bauer, Ehrhardt, Lentz, & Stollar, 1996; Barnett et al., 1999), defined as behaviors that are likely to have the greatest impact in terms of the desired outcomes and/or that lay the foundation for improved functioning in the student’s current or future environment. For example, cooperation and self-regulation, which have been repeatedly identified as keystone behaviors for children (Barnett et al., 1999; Pelco & Reed-Victor, 2007), constitute the primary or secondary targets of many of the proactive and behavioral interventions in this text.

Strategies that teach positive alternative behaviors and enhance students’ capacity to manage their own behavior are preferable to strategies that merely impose negative conse-

quences for undesired behavior. Under IDEIA, school teams must consider positive behavioral interventions and supports in developing plans to address the problem behavior of students with disabilities (34 C.F.R. § 300.324[a][2][i]).

### **Intervention Effectiveness**

Early in the history of school interventions, consultants had limited access to resources on empirically validated strategies and often relied on their own subjective judgment or personal repertoire of interventions. Given the growing database of empirically validated interventions, however, and the mandates of ESSA to implement evidence-based practices, consultants have a responsibility to recommend strategies with demonstrated effectiveness in addressing the referral problem, that is, strategies “that the profession considers to be responsible, research-based practice” (NASP Principles for Professional Ethics [NASP-PPE], 2010, II.3.9, p. 8). Indeed, part of their ethical responsibility is to keep informed about interventions that have empirical support for effectiveness and relevance for their student populations (NASP-PPE, 2010, II.1.4). All of the interventions in this book have a research base documenting their effectiveness in addressing the referral problem. In addition, each intervention includes at least two and as many as four measures for monitoring progress so that intervention plans can be modified when data indicate that the student is not responding to the intervention or that the response is insufficient to achieve the specified goal.

### **Possible Undesirable Side Effects and Outcomes**

Consultants are ethically obligated to select procedures that maintain the dignity of students and minimize the risk of adverse side effects (NASP-PPE, 2010, Principle I). Many of the interventions in this book include interdependent group contingencies, in which access to reinforcement depends on some aspect of performance for the entire group. Although group contingencies can have powerful effects on student behavior and performance (Stage & Quiroz, 1997) and are much more efficient than individually based contingency programs, consultants should be aware of the potentially negative social consequences that may occur under these systems. Although interdependent group contingencies are designed to capitalize on positive peer pressure, with group members encouraging each other to work toward the reward, peer harassment can occur if students perceive that some individuals are performing poorly or are deliberately trying to sabotage the group’s chances of earning the reward. Consultants who recommend strategies involving interdependent group contingencies should therefore advise teachers of this possibility and help them take preventive measures, such as modeling appropriate behavior if the group fails to earn the reward for a particular intervention period, selecting interventions with built-in opportunities to earn back lost points, and placing uncooperative students in a separate group so that their behavior does not reduce their classmates’ chances to obtain reinforcement. Observations during initial implementation can also help detect any undesirable side effects or negative outcomes that may not have been anticipated during the planning process.

### **Partnering with Parents**

Partnering with parents in the intervention assistance process is not only an essential component of best practice but also an integral aspect of an ecological approach to problem solving. Regardless of the level of commitment and dedication among consultants and IAT members, no one is more invested in the child’s success than the parent. The parent should be contacted by the classroom teacher as soon as a concern has been identified, rather than waiting until

a referral for intervention assistance is imminent. That is, when parents learn that their child is being referred to an IAT, communications between the referring teacher and parents, including efforts to resolve the problem, should have already taken place, so that the referral simply constitutes another phase in the intervention assistance process. Once the referral has been made, parental involvement can take many forms, including sharing information during problem identification and analysis, helping to develop the intervention plan, and helping to monitor the student's response to the intervention. One effective but underutilized form of parent involvement consists of training parents in the same academic or behavioral strategies being implemented by the teacher in the classroom. Many of the interventions in this text can be taught to parents in one-to-one training sessions or as part of group-oriented parent education programs.

Involving parents as collaborative partners throughout the intervention assistance process is consistent not only with ethical standards requiring consultants to encourage parental participation in designing services for their children—including “linking interventions between home and school, tailoring parental involvement to the skills of the family, and helping parents gain the skills needed to help their children” (NASP-PPE, 2010, II.3.10, p. 8)—but also with IDEIA mandates to inform parents about the strategies designed to increase their child's rate of learning (34 C.F.R. § 300.311[a][7]), receive progress monitoring data (34 C.F.R. § 300.309[b][2]), and participate in meetings relating to their child's identification, evaluation, and placement (34 C.F.R. § 300.501). In designing intervention plans, consultants should also be mindful that they are ethically obligated to offer alternatives regarding the services to be provided that take into account parental values and capabilities and show respect for the family's ethnic/cultural values (NASP-PPE, 2010, II.3.10). Moreover, if parents object to school-based services, consultants are ethically bound to respect those wishes and direct parents to alternative resources in the community (NASP-PPE, 2010, I.1.5).

With the widespread implementation of IATs, most school districts have developed policies requiring parental notification for referrals to team-based IATs, although formal policies relating to the need for notification in the case of individual consultants are less common. When the consultant is a regular school employee, such as a school psychologist, written parental permission is generally not necessary to consult with teachers regarding strategies for enhancing a student's opportunities to learn in the regular classroom setting, as long as those strategies do not involve unusual or out-of-classroom treatments. When a nonschool employee, such as an external consultant, will be providing consultation or intervention assistance services, however, parents should be notified in writing. Moreover, when the consultant is not a school employee, written parental permission must be obtained for school staff to provide the consultant with personally identifying student information. Parental permission is generally not required for interventions that affect all students in a class equally unless those interventions involve some unusual contingency or departure from daily routines, such as a field trip occurring off school grounds. Written parental consent should *always* be obtained for assessments and interventions that involve providing additional services to an individual student, such as a behavioral assessment, individual or small-group social skills training, or a major change in the student's educational program, especially if it involves removing the student from the classroom or treating the student differently from his or her classmates in some way. Even with classwide interventions, informing parents and inviting their input and support can enhance both acceptability and effectiveness (Brantley & Webster, 1993).

## Student Involvement

At a minimum, students should be informed about the nature of a planned intervention, the intervention agents involved, and the anticipated outcomes (NASP-PPE, 2010, I.1.3).

Explaining the essential components of an intervention plan to the target student and soliciting assent can be an empowering experience that encourages investment by the key stakeholder in the intervention assistance process. Although many students in the upper elementary grades and above can benefit from participating in consultation sessions and IAT meetings, the degree of benefit and the optimal level of involvement depend on several factors, including the nature of the referral problem, the student's capacity to participate positively in the problem-solving process, and the parents' views regarding the desirability of their child's involvement. Although there is virtually no research on the nature, extent, and results of student participation in IATs, there is some evidence that student monitoring of RTI is as effective as teacher monitoring, if not more so (Bahr, Fuchs, Fuchs, Fernstrom, & Stecker, 1993). Field testing indicates that involving the referred student in analyzing the problem, generating possible solutions, affirming intervention goals and strategies, and evaluating progress can be essential to the success of the plan, especially in the case of chronic lack of productivity and/or problem behavior. Of course, consultants must take care that the discussions in meetings attended by the student focus on developing solutions and affirming the student's capacity to participate positively in the intervention assistance process rather than on rehearsing the student's deficits. Finally, in strategies that involve another student as an intervention agent, such as peer tutoring or peer behavior monitoring, and that will not be implemented on a classwide basis, permission for the peer intervention agent to participate should be obtained in writing from his or her parents, as well as assent from the peer agent.

### **Intervention Assistance Documentation**

Documenting the intervention assistance process is important not only for monitoring the progress of the students being served but also in order to provide accountability data regarding the intervention assistance activities (Kovaleski, 2002). Intervention plans for individual students should be documented in the students' school records. If interventions are delivered through a team-based format, they should also be documented in team records. One advantage of maintaining a master set of IAT records is that all the data are together and readily available for use in program evaluation. Consultants and IAT members should bear in mind that under the 1974 Family Educational Rights and Privacy Act (FERPA; Public Law 93-380), also known as the Buckley Amendment, parents have access to essentially all of their child's school records, including records of classroom observations, intervention-related assessments, consultations, and intervention plans, as well as the right to challenge the accuracy of those records and the right to a hearing regarding their accuracy (34 C.F.R. § 99.10). Exempted from this requirement are so-called sole possession notes, defined in FERPA as "records that are kept in the sole possession of the maker, are used only as a personal memory aid, and are not accessible or revealed to any other person except a temporary substitute for the maker of the record" (34 C.F.R. § 99.3). If consultants share their notes with others, such as teachers, administrators, or IAT members, however, these notes are reclassified as educational records and become accessible to parents. Moreover, under IDEIA's procedural safeguards, parents have the right to examine any records that have been collected as part of the special education decision-making process for their child (34 C.F.R. § 300.501).

If interventions target an entire class of students and do not involve major changes in educational programming or single out any students for differential treatment, documentation in IAT records is sufficient, although providing written notification to parents is recommended.

## Evaluating Intervention Effectiveness

Ethical practice requires that consultants provide targeted, data-based interventions and “modify or terminate the treatment plan when data indicate the desired outcomes are not being attained” (NASP-PPE, 2010, II.2.2, p. 7). Although consultants and teachers alike often fail systematically to collect accountability data in the intervention assistance process, especially data directly related to student outcomes (Bahr et al., 1999; Doll et al., 2005), failure to do so means that there is no objective basis for determining the effectiveness of the interventions that have been implemented. As noted above, plans should specify the time period for evaluating students’ RTIs, as well as the specific measures that will be used for progress monitoring. Frequent progress monitoring helps to ensure that interventions that are inappropriate, inadequate in intensity, or less than optimal in some other way can be modified in a timely manner so that students are not deprived of the right to learn (Hixson, Christ, & Bruni, 2014). To facilitate progress monitoring and accountability, all the interventions in this book include at least two and as many as four methods for evaluating their effectiveness, ranging from measures already in place in regular education classrooms, such as homework completion rates and report card grades, to direct observational methods for measuring the productivity or behavior of an entire classroom group.

## Consultant Competence

Consultants are ethically obligated to be aware of the limits of their own competence and to offer services only within those boundaries (NASP-PPE, 2010, II.1.1; APA *Ethical Principles of Psychologists and Code of Conduct* [APA-EP], 2010, 2.01a). Given an increasingly diverse student population and legislative mandates for evidence-based practices and data-based decision making, demands on consultant competence are greater than ever. In practice, it can be difficult for consultants to determine the degree to which they possess an acceptable level of competency in each of the many domains in which they are providing services (intervention design, team-based consultation, professional development, data collection and analysis, etc.). As part of the process of evaluating their own competence, consultants involved in IATs should ask themselves the following questions:

- “Am I offering a broad enough range of research-based interventions to intervention agents and consumers?”
- “Do I understand the theoretical basis, rationale, and the likely outcomes for the interventions I recommend?”
- “Am I aware of the amount and quality of the evidence base for the interventions in terms of the target student population?”
- “Can I provide a comprehensive written description of intervention procedures?”
- “Can I demonstrate the strategies to intervention agents and provide them with hands-on technical assistance so that they can implement them with fidelity?”
- “Can I help intervention agents to evaluate the effectiveness of the strategies in the setting(s) in which they will be implemented?”
- “Do I understand the possible side effects or potential negative consequences of the strategies with the target student population?”

As the student population becomes increasingly diverse, consultants must continually evaluate their competence to provide services to students and families from culturally diverse backgrounds, a task complicated by the paucity of empirically based intervention studies

with students from ethnic and linguistic minorities. As stated in the most recent APA guidelines, psychologists are required “to consider client characteristics such as cultural background, disability, native language, or other diversity factors when assessing their own competence to provide services” (APA-EP, 2010, 2.01b). Similarly, NASP guidelines underscore the fact that consultants are ethically obligated to provide to students and families services that respect cultural diversity and family ethical and cultural values (NASP-PPE, 2010, I.3.2). A collaborative approach to problem solving can help to meet this standard and is aligned with ethical guidelines requiring practitioners to “enlist the assistance of other specialists in supervisory, consultative, or referral roles as appropriate in providing effective services” (NASP-PPE, 2010, II.1.1, p. 6). Moreover, consultants are required to maintain and enhance their competence by participating in professional development experiences that enhance their knowledge and skills (NASP-PPE, 2010, II.1.4). Keeping abreast of ethical and legal issues in school-based consultation and IATs is a challenging but critical aspect of continuing professional development for consultants.

### **Provisions for Referral**

Consultants must ensure that the problem-solving process does not abrogate parents’ rights under IDEIA. The intervention assistance process described above includes provisions for referring students for special education evaluations or other services if interventions are unsuccessful or if the student’s response is insufficient. Documenting interventions is important not only for assessing the student’s response to scientifically based interventions but also for maintaining a record of the strategies that have been implemented prior to referral for additional services. Because, under IDEIA, parents have the right to request that their child be evaluated at any time if they suspect the presence of a disability (34 C.F.R. § 300.301[b]), consultants should inform parents of their right to a free comprehensive evaluation for their child while also informing them of the benefits potentially available through the intervention assistance process. A review of district and state procedural manuals for IATs reveals a wide variation in guidelines for the time period during which interventions are attempted before teams move to a referral for special education services. Kovalski (2002) suggested that a period of 50 school days, from the initial referral by a parent or teacher to the completion of the IAT process, is sufficient to ensure that an intervention has had time to work without unduly delaying an assessment. Including parents as collaborators from the beginning of the intervention assistance process, including analyzing the problem, planning strategies, and assessing intervention effectiveness, not only facilitates home–school communication about the student’s response or the lack thereof but also ensures that parents are cognizant of each aspect of the problem-solving process in the event that an individual evaluation is recommended at a later date.

## **INTERVENTION FORMAT**

The intervention briefs in this book are grouped into three chapters that present academic, behavioral, and preschool strategies, in that order. Each intervention brief has a standardized format designed to be as succinct and nontechnical as possible while still including sufficient detail for accurate implementation and reliable evaluation. Samples of materials required for implementation, such as charts and student handouts, are included for many of the interventions. The format is designed to facilitate the intervention assistance process in individual and group-oriented consultative settings and has been extensively field-tested in professional



development workshops, individual and group consultations with teachers, school psychologists, and other school personnel. The 10 sections of the intervention briefs are described below. Where appropriate, we added sections to some briefs and may have not included some sections in others, but all follow this standard outline to some degree.

## **Overview**

The overview provides a brief description of the intervention, its target, a rationale for its use, and a summary of the anticipated results. Also included is information about the original setting and student participants and the results obtained in the original study or studies. For schoolwide strategies, a brief description of school demographics and other relevant characteristics of the original intervention site is included.

## **Goal**

This section presents the specific purpose or purposes of the intervention in terms of concrete, observable student academic and/or social behaviors and the function of those behaviors. We also discuss whether the intervention teaches skills (acquisition), allows for practice (fluency), builds retention (maintenance), or enhances generalization.

## **Intervention Intensity**

Many schools are currently implementing MTSS for academic and behavioral difficulties. Most utilize a three-tiered approach in which Tier 1 consists of core instruction, Tier 2 comprises targeted small-group interventions, and Tier 3 consists of intensive intervention for individual students with the most severe needs. This section discusses for what level of intervention intensity each intervention is appropriate. Many interventions can be used across tiers, so we avoid classifying them by tier but instead discuss different levels of intensity that the intervention can address.

## **Materials**

This section lists all of the materials required for successful implementation. Many interventions require minimal materials, such as posterboard for charts, and some require no material resources at all. For contingency-based strategies, suggestions for tangible, activity, or social reinforcers are included in this section.

## **Options to Monitor Progress**

The final phase of any intervention model is to monitor the effects of the intervention. Even the most well-researched intervention may not work for individual students. Thus this section presents methods for assessing the target behavior(s) in order to determine whether the intervention results in improved student performance. For each intervention, at least two and as many as four different data-gathering strategies are included, varying along a continuum of complexity, from naturally occurring classroom assessments, such as grades on tests and quizzes, to observational methods using special recording forms. Although we emphasize measures that gather information about target behaviors for an entire classroom, methods for documenting the behavior of a single student or a small group of students are also included for most interventions.

## **Intervention Steps**

This section provides comprehensive step-by-step implementation procedures. In many cases, procedures have been amplified or modified from those presented in the original studies for the sake of clarity and practicality. Every effort has been made to accommodate the realities of the regular classroom environment without sacrificing effectiveness and fidelity to the original strategy. Because teaching students a specific set of procedures is a key component of many of the strategies, two subsections—*Introduction and Training* and *Implementation*—have been added to those interventions to enhance usability. Similarly, a *Preparation* subsection has been added for several strategies requiring additional planning steps prior to implementation.

## **Variations**

This component describes one or more intervention variations. Some of these variations were developed during field testing, whereas others are derived from additional experiments presented in the original article or from other studies implementing modifications of the original intervention. By providing additional intervention alternatives for consultants to offer to teachers, these variations increase the likelihood that teachers will find some of the suggested strategies acceptable and implement them with fidelity.

## **Notes**

The notes component presents additional information designed to enhance implementation, such as tips on training students in the procedures. We also discuss any implementation issues and problems that are reported by the original authors or observed during field testing, along with suggestions for overcoming those problems.

## **Sources**

The sources section provides a complete citation for the article(s) or book(s) from which the intervention was adapted. In the case of interventions drawing on more than one source, all of the relevant references are cited.

## **Additional Resources**

This additional section, which is included for several strategies, describes print and electronic resources that can facilitate implementation, such as commercially available versions of the intervention or websites with relevant materials.

## **HOW TO USE THIS BOOK**

From the perspective of this book, school-based interventions should focus on enhancing students' academic and social competence rather than on simply reducing unwanted behavior. Moreover, interventions should target the learning context within which inappropriate behavior is occurring. Readers may use the table of contents and index to locate strategies for specific targets, such as homework completion, reading vocabulary, or disruptive behavior in nonclassroom situations.

## Cautions

As school consultants know only too well, no intervention is equally effective with every student, with every teacher, or in every situation. Intervention selection should be a collaborative effort between consultant and teacher, or among team members and referring teachers. Parent involvement is also a critical element in enhancing intervention effectiveness. In contrast to traditional school-home communications that simply provide parents with information, often negative, about children's performance, the intervention assistance approach actively encourages parents' participation in analyzing and solving their children's school problems. Finally, whether consultants are working with individual teachers, school-based teams, or parents, they can enhance their own effectiveness by offering a variety of empirically based intervention alternatives for consideration and facilitating the decision-making process rather than advocating a particular strategy.

## WEBSITE RESOURCES

### National Center on Intensive Intervention

*[www.intensiveintervention.org](http://www.intensiveintervention.org)*

The website for the National Center on Intensive Intervention (NCII) provides resources on academic and behavior interventions with a focus on children with intensive needs. The NCII also has resources on progress monitoring for both academic and behavioral outcomes.

### National Center for Learning Disabilities

*[www.nclld.org](http://www.nclld.org)*

The website for the National Center for Learning Disabilities provides numerous resources on RTI, including a parent advocacy brief with case examples of two students (both with early reading problems) illustrating the RTI implementation process.

### National Research Center on Learning Disabilities

*[www.nrld.org](http://www.nrld.org)*

The National Research Center on Learning Disabilities conducts research designed to help the learning disabilities field understand policies, practices, and prevalence of learning disabilities, as well as to identify best practices for their intervention components. Among the resources offered on the website is a learning disabilities toolkit to assist practitioners in understanding changes related to specific learning disabilities determination and RTI.

### Evidence-Based Intervention Network

*<http://ebi.missouri.edu>*

The Evidence-Based Intervention Network (EBIN) was developed with a partnership among the University of Missouri, East Carolina University, and Indiana University to develop and provide guidance in selecting and implementing classroom interventions that have convincing research to support their effectiveness. It is developed around the four phases of the learning hierarchy and provides free intervention protocols.

### Scientifically Based Research: A Link from Research to Practice

*<http://gosbr.net>*

Go SBR is a free website developed and maintained by iSTEEP (*[www.isteep.com](http://www.isteep.com)*) on which interventions are published and are free to use in schools. The interventions may be used by educational professionals in their schools without charge but cannot be sold or distributed.

### Promising Practices Network for Children, Families and Communities

*[www.promisingpractices.net](http://www.promisingpractices.net)*

Sponsored by the RAND Corporation, this website features summaries of programs and practices that have been empirically demonstrated to improve outcomes for children, youth, and families. Program infor-

mation can be viewed according to four major outcome areas: (1) healthy and safe children, (2) strong families, (3) children ready for school, and (4) children succeeding in school.

#### **Intervention Central**

*[www.interventioncentral.org](http://www.interventioncentral.org)*

Created by Jim Wright, a school psychologist from Syracuse, New York, this website offers a wealth of free tools for promoting positive classroom behavior and effective learning.

#### **What Works Clearinghouse**

*[www.whatworks.ed.gov](http://www.whatworks.ed.gov)*

Established in 2002 and sponsored by the U.S. Department of Education, the What Works Clearinghouse (WWC) is designed to provide educators, policymakers, and the public with an independent source of scientific evidence of effective educational programs and practices. The frequently updated site provides intervention and topic reports for strategies targeting elementary, middle, and high school students. Among the new features is an “intervention finder” to assist users in locating WWC-reviewed interventions based on topic and rating.

#### **Institute of Education Sciences Publications and Products**

*<http://ies.ed.gov/ncee/wwc/Publication>*

The website provides several free resources. There are 19 practice guides that summarize research for practitioners about important topics and include recommendations for practice. There are also hundreds of intervention reports that describe the research on various interventions. The website is searchable so that practitioners can find interventions for particular topics.