Introduction to RTI and the Case Study Model

Response to intervention (RTI) is a school-based system designed to identify and meet children's needs through increasingly more focused and intensive levels ("tiers") of assessment and intervention. It can be applied to academic, behavioral, and mental health issues. A key principle underlying RTI is the notion that all efforts to evaluate and resolve children's school performance deficits represent "problem solving," and that such efforts should persist until effective solutions are found. Stanley Deno (2002) defines a problem as a difference between what is (i.e., the child's low score on a measure of math skill), and what is expected (i.e., a score similar to that of the average student, or to a benchmark standard). RTI is a large-scale problem-solving process, which incorporates assessment to identify children who demonstrate deficits, and it provides intervention to reduce or eliminate the deficits.

Assessment in RTI is used in a *preventive* context, to ensure that universal instruction is effective, and to identify students who demonstrate risk for failure. At each successive level, assessment becomes more focused on conditions associated with poor school performance. Decisions (i.e., about the need for intervention, characteristics of appropriate interventions, and effectiveness of interventions) are based not on the judgments or opinions of teachers and other instructional personnel but on data generated in the course of assessment, as well as on the strength of evidence supporting the choice of a particular intervention strategy.

In a *remedial* context, RTI is used to gather information needed to select appropriate interventions and to monitor their effects. Intervention in RTI consists of scientific, research-based strategies to remediate deficient performance, provided on a classroom, group, or individual basis. Increasingly more intensive and specialized forms of intervention are introduced as children demonstrate failure to respond adequately to interventions provided at each successive level. At the most intensive level (Tier 3), the selection of an appropriate and effective intervention requires in-depth study of factors contributing to or maintaining the child's performance deficit. This process—along with procedures to monitor and judge the success of interventions—is implemented in the form of a case study.

CONTEXT AND HISTORY

Although relatively new to the field of school psychology, the conceptual and practical foundations of the RTI model are not new. In the field of special education, attention has long been paid to the need to track children's academic progress and to apply evidence-based interventions to their learning problems (Deno & Mirkin, 1977; Ysseldyke & Algozzine, 1982). In recent years, the shift in attention from procedural accountability (i.e., are schools following the rules?) to accountability for student outcomes (i.e., are students learning?) has created an ideal environment for RTI, with its emphasis on routine and systematic assessment of student performance. The Elementary and Secondary Education Act (ESEA), reauthorized in 2001 as the No Child Left Behind Act (2002), mandated the attainment of satisfactory levels of academic skills by all children, lending a sense of urgency to efforts to improve instruction and intervention for underperforming students.

In the mid-1970s, the behavioral consultation (BC) model was introduced as a method for defining student performance problems, identifying contributing factors, developing interventions targeting those factors, and measuring the success of interventions (Kratochwill & Bergan, 1990) (See Table 1.1 for a summary of the stages of the BC model). Variations of the BC model have evolved over the years and have been adopted by most states in policies requiring intervention in general education, prior to consideration of special education eligibility (Buck, Polloway, Smith-Thomas, & Wilcox Cook, 2003).

Numerous studies support the effectiveness of BC and its procedural offspring for addressing children's school performance problems (Burns & Symington, 2002). The emphasis of these approaches on the collection of data to describe student performance and measure intervention outcomes has been complemented by the growing popularity of assessment techniques such as Curriculum-Based Measurement (CBM), which

Table 1.1 The Four General Stages of Behavioral Consultation

- Problem identification (definition of the problem in measurable terms, including comparison with some standard or norm that defines "expected" performance)
- Problem analysis (study of the factors that are contributing to the problem; in functional assessment, this includes developing and testing hypotheses about environmental factors that are functionally related to the problem)
- 3. Plan implementation (intervention carried out according to a plan that includes frequent measurement of the child's progress during the intervention as well as monitoring of intervention fidelity)
- Problem evaluation (review and analysis of progress-monitoring results to determine whether the intervention should continue, change, terminate, or be phased out)

Source: Adapted from Bergan and Kratochwill (1990)

directly measure children's academic skills (Hosp, Hosp, & Howell, 2007). These developments provide technical support for RTI, with its dual emphasis on assessment and intervention as key elements of effective educational practice.

A third factor has contributed to the growing influence of the RTI approach: the poor "treatment validity" of so-called "test-and-place" practices, in which diagnostic evaluations often led to special education placement (where appropriate interventions were assumed to occur). Test-and-place practices have been criticized for their use of evaluation procedures that seek to identify deficits in individual aptitudes—often inferred from the results of individual intelligence tests. This, in turn, leads to recommendations for interventions to remediate those deficits (and, by further inference, the academic problems thought to result from aptitude deficiencies).

However, research support for this approach has been limited, and efforts to link test-and-place practices with meaningful and effective intervention have been largely unsuccessful (Reschly & Ysseldyke, 2002). In contrast, RTI employs direct measurement of academic performance and behavior, identifying relationships between problems and environmental factors through a process of hypothesis testing. When appropriate targets for intervention have been identified (e.g., opportunities for students to practice skills, incentives for accurate performance), strategies are devised to modify or create environmental conditions that will optimize the potential for improved student performance.

Finally, while the RTI model can be applied to a range of suspected disabilities, its growing popularity can be traced to concerns about unacceptably

high rates of learning disability diagnosis and special education placement. This disability category accounts for just over 50% of children enrolled in special education programs (Vaughn & Fuchs, 2003). Federal government initiatives clearly conveyed concern about problems that were apparent in practices used to identify learning disabilities.

In December, 2003, the National Research Center on Learning Disabilities (NRCLD) (2004) held a symposium to explore alternatives for meeting the needs of children with specific learning disabilities. Created by the U.S. Department of Education (Office of Special Education Programs, OSEP), the NRCLD, a joint endeavor of Vanderbilt University and the University of Kansas, had been given the task of conducting research and helping schools learn about more effective service delivery models. Prior to this symposium, OSEP had sponsored the *Learning Disabilities Summit: Building a Foundation for the Future* in August, 2001, and commissioned a series of white papers and roundtable discussions on the topic (Bradley, Danielson, & Hallahan, 2002).

The *Executive Summary* of the 2003 NRCLD Symposium outlines the problems that led to the OSEP initiative:

the exponential increases in the number of students who are considered to have learning disabilities, the reliance on IQ tests, the exclusion of environmental factors, the inconsistency in procedures and criteria within school districts and across states, and the reliance on aptitude-achievement discrepancy formulas and the manner in which they are used." (NRCLD, 2004, p. 1)

In addition to these concerns, Kavale and Forness (1999), reported results of a meta-analysis of research on special education suggesting that placement of children with disabilities in special education programs *in itself* often did not result in meaningful improvement, perhaps due in part to lower student performance expectations.

In the 2004 reauthorization of IDEA, legislators addressed these concerns by offering an alternative to traditional test-and-place practices. Specifically, the law allowed schools to "use a process that determines if the child responds to scientific, research-based intervention as part of the evaluation procedures" (Individuals with Disabilities Education Improvement Act, 2004, P.L. No. 108-446, par 614). Commonly interpreted as a reference to RTI, this language suggests that the process of delivering interventions based on ongoing performance assessment can serve as a basis for determining whether a child has a specific learning disability. It shifts emphasis from a determination of disability based on results of diagnostic tests administered at one point in time to an examination of data resulting from the application of interventions over time.

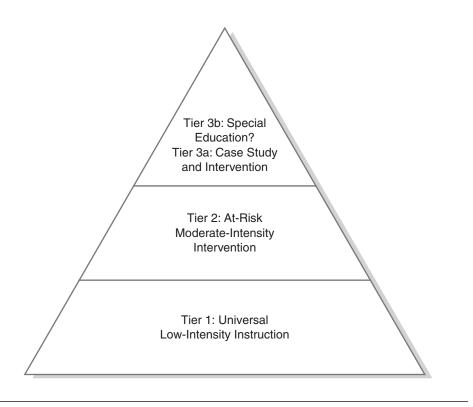
In summary, a variety of factors has created an environment conducive to RTI implementation, including mandates for accountability, the evolution of behavioral consultation and related models for service delivery, the push for evaluation practices with greater "treatment validity," and dissatisfaction with assessment and placement practices for children with specific learning disabilities.

THE RESPONSE TO INTERVENTION PROCESS

Assessment and intervention practices employed in the RTI model are typically described in context of three "tiers," organized hierarchically to reflect increasingly more focused assessment and more intensive intervention (Figure 1.1).

Tier 1. Tier 1 is considered a form of "primary prevention," in that it involves all children in high quality, research-based core instruction, as well as periodic assessment of performance. It is similar to the evidence-based practice of inoculating all children against disease or conducting periodic "well-child" exams to ensure satisfactory development. Tier 1 includes differentiated instruction (e.g., flexible grouping) and classroom accommodations (e.g., study aids) to enhance children's understanding of core instruction. Universal screening at Tier 1 consists of quarterly assessment of

Figure 1.1 Response to Intervention "Pyramid"



key academic and behavioral targets or skills. Local norms can be generated from these assessment results and, along with benchmark standards, are used to evaluate students' progress toward established goals. Tier 1 assessment also may include strategic monitoring of the performance of students who display moderate performance deficits and of emergent reading skills of students in the primary grades.

Tier 2. When Tier 1 assessment identifies children who are not making adequate progress, the second level of the assessment and intervention process is activated. Tier 2, a form of "secondary prevention," consists of "additional individual instruction, small group instruction, and/or technology-assisted instruction to support and reinforce skills taught by the classroom teacher" (McCook, 2006, p. 30) or interventions to reduce the occurrence of behavior problems among individuals known to be at risk. Tier 2 interventions are generally chosen from a set of research-based strategies selected by the school for remediation of targeted academic and behavior problems. They are considered to be of moderate intensity because they involve more resources than would be available to entire classes, but do not require the highly specialized resources and strategies that are delivered at Tier 3.

What kinds of intervention are used at Tier 2? In some cases, Tier 2 interventions—which are always offered *in addition to* the instruction of Tier 1—consist simply of additional time and opportunity for review and practice of skills, which can be provided by the general education teacher, a classroom aid, or even the student or the student's classmate. Other Tier 2 interventions make use of ancillary personnel, such as federally funded reading and math tutors, who provide additional instruction for students having difficulty acquiring skills, or classroom aids who monitor and provide feedback and incentives for targeted behaviors. However, the mere assignment of a student to an existing remedial program does not guarantee that a valid, research-based intervention will be used at Tier 2. Instead, instructional practices and materials and behavior plans should be reviewed to ensure that they have research support and that the intervention strategies themselves are used in an appropriate and consistent manner.

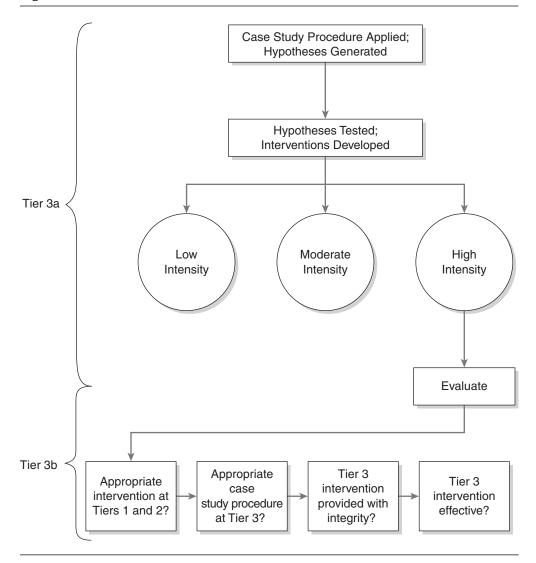
Still other Tier 2 interventions are drawn from the "standard treatment protocols" developed by literacy experts, particularly for use with children in the primary grades. The "empirical approach" to problem solving also can be used; in it, general education teachers or teams select interventions from an array of strategies that research has shown to be effective for various types of problems, without testing their effectiveness for specific children (e.g., repeated readings or listening previewing for reading fluency problems, active teaching of classroom rules with incentives for compliance in the case of behavior problems).

Tier 3. The topmost area of the pyramid-shaped RTI model is reserved for those (relatively few) students who do not make adequate progress at Tier 2. The assumption underlying Tier 3 is that instruction and interventions delivered at Tiers 1 and 2 have not targeted the actual cause of the problem, so further assessment is needed. The case study model provides a framework for this assessment. It uses a planning process that takes into consideration children's unique needs and circumstances, in contrast to Tiers 1 and 2, where *standardized* interventions are offered to children who demonstrate risk for failure.

Unlike Tiers 1 and 2, Tier 3 has not received much attention in discussions of the RTI model, probably because it is often considered to be equivalent to special education. In fact, The National Research Center on Learning Disabilities (2007) observes that, "in most schools, Tier 3 might be synonymous with special education," although the author goes on to describe it as "sustained, intensive support in the specified area of need . . . tailored to the individual student . . . [which] may continue for much longer periods, depending on student need" (p. 7). The difficulty with equating Tier 3 with special education placement is that it does not allow for the conceptual framework of RTI as a problem-solving model to be incorporated into the third tier of the process. Although special education services and comprehensive evaluation to determine eligibility may occur at Tier 3, the tier is defined in more general terms as individual assessment and intervention to meet children's unique and specific needs, without regard for the setting (special vs. general education) in which it occurs.

The case study procedure in this text presents Tier 3 in two phases (see Figure 1.2); Tier 3a consists of the application of the case study procedure to generate and test explanations (hypotheses) for the child's performance problem. When a "high probability" hypothesis has been identified, interventions targeting factors implicated in that hypothesis can be developed and monitored to evaluate effectiveness. Interventions may vary in intensity, from low (e.g., additional practice opportunities in a peer-assisted learning context, based on a hypothesis of "insufficient practice"), to moderate (e.g., daily small group instruction to teach decoding or comprehension skills, based on a hypothesis of "insufficient help/instruction"), to high intensity (e.g., daily one-to-one instruction using curricular materials from a lower grade level). Children who require high-intensity interventions receive them in context of Tier 3 (often, but not always, on an individual basis), while those requiring less intensive intervention might be assigned to participate in intervention activities already in place for children at Tiers 1 and 2. When a high-intensity intervention is required, it may be of such a specialized nature that a disability is suspected, triggering an evaluation to determine whether entitlement to the intervention in the form of an individual education plan—is warranted.

Figure 1.2 Tier 3 of the RTI Model



To determine whether a disability is present, interventions of high intensity should be evaluated (Tier 3b) across several criteria: First, whether appropriate, evidence-based interventions were provided as intended at Tiers 1 and 2; second, whether the case study procedure at Tier 3 was applied in an appropriate manner (i.e., with "fidelity"); third, whether the intervention resulting from the case study procedure was provided as intended (i.e., with "integrity"); and, fourth, whether progress-monitoring results indicate that the intervention was effective (successful or promising). These conditions all must be met before the question of eligibility for special education (i.e., legal entitlement to intervention using specialized resources, based on an individual

education plan) should be considered. The decision-making process associated with special education eligibility determination is described in more detail in Chapter 9.

Although the focus of most of the literature is on academic performance problems, the RTI framework also can be used to address behavior problems. Tier 1 "instruction" would include the behavior management techniques used on a schoolwide or classwide basis, with all students. Schools employing positive behavior supports (PBS), for example, might post the names of students who have demonstrated exemplary behavior or award points to students or classes that have low rates of disciplinary referrals. As long as these methods are used with all students in the class, grade level, or school, they are considered to be Tier 1 instruction.

Students who fail to demonstrate acceptable levels of appropriate behavior under Tier 1 conditions alone are moved to Tier 2, where interventions known to be effective with behavior problems are introduced. An example of a Tier 2 intervention is differential reinforcement, a research-based strategy that involves reinforcement of desired behavior and planned ignoring of undesired behavior. As a Tier 2 intervention, differential reinforcement would be used by teachers with those few students who continue to display unacceptable levels of problem behavior, in contrast to their peers, for whom Tier 1 instruction has proven adequate.

At the next level—Tier 3—assessment is needed to clearly define the problem behavior (and its target or replacement behavior), certify its severity, and identify factors that are causing or maintaining the problem behavior. This information is used to generate hypotheses that are then linked to interventions. In a manner similar to that employed for academic problems, behavioral interventions are monitored through frequent observations of student performance, with comparison to baseline levels of performance and goals established by intervention planners. Inadequate progress toward specified goals is evidence that an effective intervention has not yet been identified, and there is a need to improve or replace the intervention until a satisfactory level of performance has been attained.

THE CASE STUDY MODEL AND PREREFERRAL INTERVENTION

The five-stage process used in this text to describe the case study conducted at Tier 3 is a modified version of the model described by Bergan and Kratochwill (1990) summarized in Table 1.1. It also addresses several problematic features of *prereferral intervention*, an early version of the case study process outlined in the work of Graden, Casey, and Bonstrom (1985a).

Initially conceived as a dyadic consultation process (e.g., involving a teacher and school psychologist), prereferral intervention came to be associated with a team-based delivery model, in which a group of teachers, administrators, and specialists served as consultants, typically to the general education teacher who referred the student. Many terms have been used to describe this model, including mainstream assistance teams, intervention assistance teams, instructional assistance teams, and intervention-based assessment teams. What they all have in common is a step-by-step problemsolving sequence, typically some derivative of behavioral consultation (Bergan & Kratochwill, 1990). This problem-solving process is used in prereferral intervention to develop and deliver interventions to children in the general education setting. Prereferral intervention, which occurs in general education settings, reported success in reducing referrals to special education, and enhancing student achievement (Graden, Casey, & Bonstrom, 1985a; Fuchs, Fuchs, Bahr, Fernstrom, & Stecker, 1990; McNamara & Hollinger, 2003).

As more states adopted some form of team-based prereferral intervention, it began to be treated as a recommended or mandatory prerequisite to referral for evaluation for a suspected disability (Truscott, Cohen, Sams, Sanborn, & Frank, 2005). This fact, combined with the problems that accompany the transition from laboratory to field (sometimes termed the "research to practice gap"), led to a number of problems that continue to plague field-based prereferral intervention practices. The five most salient problems are related to student outcomes, collaboration and teaming, interventions, decision making, and special education focus; these are explained below, along with the manner in which they are addressed in the case study model employed at Tier 3 of the RTI process.

Student outcomes. Although team-based prereferral intervention received positive reviews from educators and, especially, parents, studies using *actual student outcomes* are lacking, and those that do exist report equivocal results (Fuchs, Mock, Morgan, & Young, 2003; McNamara, 1998). In contrast, studies have shown that application of the RTI model in general, and the case study procedure employed at Tier 3 in particular, result in improved student outcomes (Burns, Appleton, & Stehouwer, 2005; Gresham, 2002; MacLeod, Jones, Somers, & Havey, 2001).

Within the case study procedure itself, numerous provisions are made for data-based decision making about the nature and severity of student problems, factors contributing to problems, and the effectiveness of intervention outcomes. These provisions include the use of single-subject designs for hypothesis testing and progress monitoring, as well as decision rules for determining whether the intervention has been successful. In every instance, student performance data are drawn from direct measures such as Curriculum-Based Measurement or behavioral observation. In addition, technical adequacy of the case study can be monitored for

fidelity of implementation by using the case study rubric that is presented in this text. All of these provisions enable researchers to link application of the case study procedure—embedded within the RTI model—to data demonstrating improved student outcomes.

Collaboration and teaming. Collaboration among stakeholders in the problem-solving process has been cited as a critical component of intervention success (Allen & Graden, 2002). This would seem to be especially important for classroom teachers, who are typically given responsibility for implementing interventions (Slonski-Fowler & Truscott, 2004). However, enthusiasm for team-based "collaborative problem-solving" has been dampened somewhat by observations that many studies demonstrating successful prereferral intervention employed a dyadic consultation model, which does not necessarily translate to the team-based practices currently employed in most schools. Research has shown that the success of teams depends on knowledge and skills, which members may not possess (Flugum & Reschly, 1994; Telzrow, McNamara, & Hollinger, 2000), and that collaboration may not be necessary for successful problem solving (Schulte & Osborne, 2003). Teams report problems in functioning (e.g., inadequate leadership, inequitable task distribution, conflict) that could limit their effectiveness, to the extent that issues related to team dynamics detract from the quality of a team's problem-solving performance (McNamara, Rasheed, & DeLamatre, 2008). Consistent with this observation, Lee and Jamison (2003) found that the fidelity with which a problem-solving sequence was applied was influenced by patterns of interaction among team members. So, although collaborative problem solving was conceived as a coequal partnership between specialists and general educators, in practice, it often did not live up to initial expectations.

In contrast, the RTI model invites collaboration in several ways that are well matched to the strengths of teams, beginning with examination of the results of universal assessments to determine whether instruction is effective and to identify students in need of intervention. Teams also play a key role in creating structures to support the delivery of interventions at Tier 2; Burns and Gibbons (2008), for example, have suggested that grade-level teacher teams should meet regularly to examine the progress of students and troubleshoot interventions. However, the RTI process is not limited to deployment in team meetings focusing on the needs of a small subset of students, but it is a part of the everyday operation of the school.

The RTI model, including the Tier 3 case study procedure, offers two features that restore and enhance the collaborative partnership between consultants (such as school psychologists) and teachers. First, it reconfigures the role of the school psychologist to become a problem solver who works with general education teachers in both preventive and remedial capacities. Instead of serving primarily as a gatekeeper for special education, school psychologists working as consultants within an RTI framework

help teachers accomplish their classroom goals. As the relationship between a teacher and the school psychologist develops, a level of trust and mutual understanding facilitates the selection and use of assessment and intervention strategies that are not only appropriate to the needs of students but also feasible for classroom use.

The nature of Tier 2 interventions also holds promise in eliciting a greater degree of cooperation from classroom teachers. General education teachers may have limited knowledge of alternative strategies, and they are sometimes unwilling to attempt interventions, particularly if they view them as complicated and demanding. At Tier 2, interventions that are appropriate for use in general education settings, many of them standard protocols designed for small groups of students, are recommended. If teachers themselves are responsible for delivering Tier 2 interventions, they need only learn those strategies selected for implementation at their grade level or for targeted deficits (e.g., standard protocols or methods such as peer-assisted learning) and techniques for enhancing their effectiveness (e.g., adding rewards, increasing frequency of intervention sessions).

In some cases, the instructional interventions used at Tier 2 can be adapted for use with an entire class. These qualities make it easier and more practical for teachers to deliver interventions to students in general education settings. By reducing the demand on teachers to provide individual accommodations for students who will instead receive small group intervention at Tier 2, the RTI process may lead to greater willingness on the part of teachers to provide individualized intervention for those few students who reach Tier 3.

Interventions. Clearly, the quality and integrity of interventions are key elements of success. There is substantial concern about the *quality and integrity of interventions* in the prereferral model. Despite the call for the use of research-based practices, interventions often are of poor quality, inadequately defined, and poorly communicated to those responsible for providing the interventions (Flugum & Reschly, 1994; Telzrow et al., 2000). Interventions also suffer from a lack of infrastructure to support them, resulting in inadequate integrity; that is, those delivering interventions often do so in ways that differ significantly from the initial plan, if they deliver them at all (Gresham, 1989). Since many prereferral teams fail to collect appropriate progress-monitoring data, they have no means to determine on a timely basis whether interventions are having the desired effect (Telzrow et al., 2000).

As a systematic procedure for creating and supporting feasible interventions in general education at Tier 2, the RTI process is likely to yield greater degrees of intervention integrity; that is, classroom teachers may be more likely to implement them as designed. Since the needs of a greater proportion of students can be adequately addressed at Tier 2, teachers may

be better able to manage the demands for individualized intervention at Tier 3. The case study model requires that interventions be monitored for implementation integrity and offers recommendations for doing so (e.g., the use of observers, performance feedback, and implementation checklists). This provision increases the likelihood that interventions will be administered appropriately and consistently. Finally, a growing network of resources supports the selection and delivery of scientific, research-based interventions.

Currently, sources of empirical evidence for intervention efficacy are found in various literatures and sponsored Web sites (Kratochwill, Clements, & Kalymon, 2007). The Clearinghouse of Evidence-based Practices (Kratochwill, 2007), although in its infancy, is planned to evaluate and organize interventions in an easy-to-use, convenient location. In a meta-analysis of available research, Swanson, Hoskyn, and Lee (1999) identified a number of interventions found to be effective for children with academic performance problems; these and other studies are a rich source of information about evidence-based strategies that can be embedded at various tiers of intervention. In addition to the selection of quality interventions, the case study model employs data collection and progress-monitoring procedures (as well as clear decision rules) that identify ineffective interventions several weeks (rather than months) after their initiation, so they can be improved or replaced with more effective strategies on a timelier basis.

Biased decision making. Most prereferral models depend on subjective referrals or biased decision making to identify students who need additional help. For example, studies have shown that teachers are influenced by children's characteristics when deciding whether to refer children for evaluation (Bahr, Fuchs, Stecker, & Fuchs, 1991; Clarizio, 1992). Concern also has been expressed about teachers' ability to reliably identify all students needing assistance, as well as their willingness to do so (Slonski-Fowler & Truscott, 2004). At the other end of the spectrum are concerns about the referral of students whose problems really don't require the intensive problem-solving process used in prereferral intervention. In some instances, the failure of poorly planned or inadequate interventions led teams to conclude that evaluation for a learning disability was the only route to meaningful intervention for many students (McNamara, DeLamatre, & Rasheed, 2002; McNamara & Hollinger, 2003).

Biased decision making regarding referral and program placement leads to over or under representation of diverse student populations and to unreliable application of standards for determining children's need and eligibility for services requiring scarce educational resources (e.g., special education and related services). The remedy for bias lies in the use of a structured, data-based process that provides clear, explicit rules for decision making, not only eliminating bias from decision making but also providing accountability information.

At Tiers 1 and 2 of the RTI model, student learning is assessed periodically using measures directly related to the general education curriculum. Data are displayed on a graph that can be used to decide whether adequate progress toward curricular goals is occurring either for groups of students (Tier 1) or for those receiving more intensive services (Tier 2). When growth is inadequate, intervention can be changed or intensified. At Tier 3, data already collected at Tiers 1 and 2 can be used to define a child's problem in behavioral terms. With bias eliminated and a commitment to effective intervention for all children, schools can modify instructional practices and adjust decision rules so that appropriate proportions of the student population are represented at each tier of the RTI model.

The most common three-tier RTI model (see Figure 1.1) suggests that Tier 1 instruction will elicit an adequate response from 80% of the student population; Tier 2 intervention will be sufficient for 15%; and Tier 3 intervention will be needed by 5% of the school population (Reschly, 2008). These cutoff points are somewhat arbitrary, and it may be prudent to adjust them according to the needs of the school population, since it may not always be feasible to strengthen instruction to the degree required for success at Tiers 1 and 2. For example, a school with a large proportion of students who are functioning well below the expected national benchmark may choose to increase the proportion of students in Tiers 2 and 3. In this way, the RTI system allows for regulation of stable numbers of students who qualify for special education services (a subset of those receiving intensive intervention at Tier 3).

When properly applied, the research-based instruction and supports of Tiers 1 and 2 will have been successful for some children, thereby enabling problem-solving teams to address only the problems of those children who need individualized assessment and intervention. This *gating function* is one of the most valuable features of RTI. Without it, intervention teams receive referrals to conduct evaluations and plan individualized interventions for children who might have been successful with intensified small-group instruction, thereby consuming time and resources needed elsewhere.

Special education focus. Prereferral intervention has been plagued by a narrow view of it as a *prerequisite to special education evaluation*. Many educators persist in believing that special education placement in itself will solve children's academic and behavior problems, and they are not motivated to implement "general education" interventions that they expect to fail (Eidle, Truscott, Meyers, & Boyd, 1998). Financial incentives promote special education placement (i.e., federal funds based on annual counts of children with disabilities), and teachers may be motivated to seek placement that will relieve them of responsibility for children who are difficult to teach. Consequently, the prereferral intervention process is sometimes regarded as a necessary evil on the way to the *real* intervention known as

special education, and prereferral intervention is undertaken with an expectation of failure.

Apart from findings consistently demonstrating that special education has not been effective in resolving children's academic problems, labeling children with a disability is a high-stakes decision that should not be undertaken without adequate justification (Burns, Jacob, & Wagner, 2008). In addition, as the law places increasingly greater demands on schools to show evidence of actual gains in student performance, special education placement may be less likely to be regarded as a panacea.

When it is necessary to use information generated in an RTI framework for making special education eligibility and classification decisions about individual students, such information should be interpreted as *an indicator of the student's need for intensive interventions* rather than a diagnostic tool. RTI is a better source of information about effective instruction and intervention than it is for the classification of children's abilities and disabilities. Essentially, it is a "rule-in strategy" to find the most appropriate intervention, not a "rule-out strategy" for identifying what does not work. The second phase of Tier 3 (which we have termed *Tier 3b*) is not a series of actions that is separate from and *follows* the RTI process but an evaluation of the nature of effective interventions that have been developed through the case study process. Although Tier 3 is not equivalent to special education, as some interpretations suggest, it can lead to and inform the eligibility determination process.

The case study model has been structured to include a detailed series of requirements and has been transformed into the case study rubric (presented in Chapter 10) to guide implementation and to ensure that all student concerns are addressed in a consistent manner. Key elements of the model include collaborative problem solving, data-based decision making, logical linkage between the stages, and fidelity of case study procedures.

In the first phase of the case study, facilitators verify that data gathered from Tiers 1 and 2 are sufficient to initiate a more focused and intensive problem-solving process. Also during this phase, the behavior is operationally defined and quantified in terms of both current and desired levels of performance, and the severity and importance of the problem are documented ("problem identification and certification"). In the second phase ("problem analysis"), data from various sources are used to generate hypotheses for academic and behavior problems, based on both skill and performance perspectives. Resulting "high probability" hypotheses are tested to verify the cause of the problem; these hypotheses can be linked to appropriate intervention strategies. In the third phase ("plan implementation"), research-based interventions are implemented, while treatment integrity and intervention effectiveness are monitored. Finally, in the fourth and last phase ("plan evaluation"), progress-monitoring data are evaluated to determine intervention effectiveness; successful interventions

may be continued or faded, while those that are less successful may be modified. At this final stage of the process, it also is important to evaluate the fidelity with which the case study procedure was applied since, in some cases, the apparent failure of an intervention may in fact be due to inappropriate or inadequate problem solving.

SUMMARY

The RTI framework holds considerable promise in addressing the concerns described in this chapter—specifically, those having to do with biased referral, unwieldy prereferral team caseloads, the need for more and better research-based interventions that teachers actually will use, and the unfounded notion that every child experiencing problems needs an individualized intervention. The case study model was constructed as a structured, data-based decision-making process to find solutions to problems and to overcome unproven assumptions about special education as the only effective solution to the problems of children who are difficult to teach.