

Creating a Vision and Framework

1

Over the past several decades, how best to improve America's public education system has been heavily debated by educators, researchers, politicians, and the general public. It seems that everyone involved in the debate has their own opinion of what would fix the problems—as a result, the staffs of our nation's schools have been subjected to what seems like a constant stream of new programs to be implemented, none of which has apparently had the desired effect.

Yet there is little debate over the fact that changes are needed. The accountability built into the No Child Left Behind (NCLB) legislation has revealed significant gaps in academic performance between the general school population and subgroups of children such as those with disabilities, members of minority groups, and children living in poverty. It is generally agreed by school practitioners that the goal of having every child read on grade level by 2014, as required in NCLB, is not attainable if schools continue on their current track.

This book is about legitimate, effective school improvement through Response to Intervention (RTI). It is not about another new program like those that educators have seen come and go. Taken seriously and implemented effectively, it has the potential to transform classrooms into highly effective, highly motivating arenas of learning. However, it is important to understand that the process will only be effective if implemented in its entirety. We (the authors) do not recommend using only parts of the RTI process or simplifying them to achieve minimum standards.

Our vehicle for change involves a process of identifying students at risk, pinpointing highly effective strategies specifically designed to address the students' areas of need, implementing the strategies with fidelity, and utilizing assessment to determine progress and adjust instruction. It is not a difficult process in and of itself. However, it can only be effective in an atmosphere that is characterized by a commitment to see *all* children succeed.

2 • Using RTI for School Improvement

The process presented in this book is based on levels or tiers of increasingly intensive interventions. As students are identified as exhibiting risk for school failure, they are instructed using interventions designed to eliminate or correct the cause of failure. Their progress is monitored using simple assessment tools. Again, it is not a difficult process, but it does involve a change of mind-set from that found in most public and private schools. There must be a firm commitment at both the district and the school level to provide whatever is necessary to enable all students to be successful academically and behaviorally. Implementation involves rethinking job descriptions and reallocating resources. It involves extensive training for teachers and administrators. It involves changing the way America's schools are run and the way its students are taught. Without this change of mind-set, the process can only have minimal success.

We present this process to you with the combined insights of having served as general education teacher, special education teacher, building administrator, system administrator, consultant, and parent. We fully understand what is involved in running a classroom, a school, and a school system. As consultants, we travel throughout the country, observing in classrooms and talking with teachers. We understand the tendency to stay with what is familiar—to teach the way you were taught. And yet, we believe that full implementation of the process outlined on the following pages will transform classrooms, schools, and districts into highly effective learning environments.

Our school improvement process involves implementation of pyramids of intervention. Pyramids of intervention, as stated above, involve layers of increasingly intensive interventions or strategies designed to address learning or behavioral problems exhibited by students who are at risk for school failure. These pyramids have taken several forms, including tiered reading models and RTI models. In this book, we focus on RTI and its role in the overall school improvement process.

RESPONSE TO INTERVENTION AND TIERED READING MODELS

A review of research literature written since 2000 reveals a huge volume of information regarding Response to Intervention. RTI was first implemented in the 1970s and has since become an accepted means of addressing academic and behavioral problems, especially in young children. After it was included in the 2004 Reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA 2004), RTI has gained momentum as a viable method for identifying students with

learning disabilities while ruling out poor instruction as the cause of learning problems.

Much of the research on RTI has involved a three-tiered reading model that incorporates the work of the National Reading Panel (NRP). The NRP was a federally appointed group of reading experts who met for over two years, reviewing research on reading instruction. In April 2000, the panel submitted to Congress its report, which outlined five components essential to reading instruction. The components were identified as phonemic awareness, phonics, fluency, vocabulary, and comprehension, applied as appropriate to the particular grade level's educational standards (National Institute of Child Health and Human Development, 2000). This landmark report was a comprehensive outline of effective reading instruction and was unlike any document previously developed. It clearly specified the elements involved in learning to read and made the information easily accessible to teachers and researchers alike.

In 2001, President Bush included the NRP findings in the No Child Left Behind Act (NCLB). NCLB created an initiative called Reading First, which provided funding and resources to states and districts to establish programs for reading instruction. It also initiated a requirement that all school-wide programs operate according to a plan that contains proven strategies designed to facilitate school-wide reform and improvement. Further, NCLB requires that any strategy considered for this purpose be research-based and likely to produce the desired results (U.S. Department of Education, 2001). This requirement for scientific, research-based strategies would become central to future development of pyramids of intervention.

Acting on the recommendations of the NRP report and NCLB requirements, researchers began intensive studies of the most effective ways to teach reading, assess reading progress, and remediate reading difficulties. Sharon Vaughn and her colleagues at the Vaughn Gross Center for Reading and Language Arts initiated numerous studies, including a four-year project entitled Preventing Reading Difficulties: A Three-Tiered Intervention Model. The project was designed to address reading problems with at-risk students by providing intensive early intervention. The model used in the project involved three tiers, designated as primary, secondary, and tertiary intervention (Vaughn Gross Center for Reading and Language Arts, 2006). At Tier 1, all students received core reading instruction during the reading block. Through varied formal and informal assessments, the teacher determined students' responses to core instruction and identified which students were at risk for reading failure. For students who were not adequately progressing when provided core instruction, Tier 2 provided additional exposure to the core curriculum or to an alternative program or strategy with more intensive instruction. Intensity was increased

4 • Using RTI for School Improvement

in that the teacher–student ratio was typically decreased to four to five students per teacher and the student received additional instruction time (usually 30 minutes per day). Using various forms of assessment, teachers determined students' response to Tier 2 instruction. Students who were not adequately responding to Tier 2 instruction began a more intensive program of intervention in Tier 3. The manner of instruction and intensity was further adjusted based on students' responses. At this level, instruction was more intense, group size was smaller, and supplemental instruction lasted longer.

Similar studies have been implemented frequently over the past several years (D. Fuchs, Fuchs, & Compton, 2004; Speece & Case, 2001; Vaughn, Linan-Thompson, & Hickman, 2003; Vellutino, Scanlon, Small, & Fanuele, 2006). Each of the studies cited here involved young children (most often kindergarteners or first-graders) who were identified through curriculum-based measurement as being at risk for reading failure. The students were provided intensive interventions using a highly effective research-based reading intervention for a specific time period. Students' progress was continually evaluated, and instructional adjustment was made based on student response.

As the three-tiered reading model evolved, it was adopted as the basic framework for implementation of RTI (Bender & Shores, 2007; D. Fuchs & Fuchs, 2006; L. S. Fuchs & Fuchs, 2007; Mastropieri & Scruggs, 2005). Just like the previously described reading model, RTI involves tiers (usually three or four) of increasingly intensive instruction provided to students identified as non-responders at the previous tier. The instruction uses high-quality, research-based strategies coupled with ongoing progress monitoring using curriculum-based measurement tools or other brief assessments. After progressing through the tiers as a non-responder, a student may ultimately be determined to have a specific learning disability (Bender & Shores, 2007).

As stated earlier, RTI has a long history but has gained significant attention since its inclusion in IDEA 2004 as a means of determining learning disability eligibility. In order for you to understand the full impact and implications of RTI for school improvement, we feel it is necessary to paint the “big picture” by reviewing the history of the RTI process.

HISTORY OF RESPONSE TO INTERVENTION

The first studies utilizing a Response to Intervention model were conducted by Deno & Mirkin (1977) and Bergan (1977). The Deno & Mirkin study, perhaps the first three-tiered reading study, utilized curriculum-based measurement to assess students' reading skills. Goals based on

benchmark assessments were developed for students identified as at risk for reading problems. Students were taught in small groups and assessed through continued use of the benchmark assessments (Batsche et al., 2006).

Bergan's (1977) study involved a behavioral problem-solving process in which the behavior issues were observed and measured in the classroom setting. A behavioral goal was established based on expectations for all students. Interventions specific to the identified problem were implemented, and improved changes in performance were assessed by comparing current behavior to the established goal (Batsche et al., 2006).

These studies served as the foundation for future research and development of two distinct models of what we currently know as Response to Intervention. These models, the Standard Protocol Model (based on Deno & Mirkin, 1977) and the Problem-Solving Model (based on Bergan, 1977), continued to be implemented and evaluated sporadically over the next two decades. Discussions about RTI as a means of identifying specific learning disability (SLD) became more frequent among researchers and policymakers. In 2001, President Bush established the Commission on Excellence in Special Education to study and make recommendations for improvements to the provision of services for students with disabilities (2002). The commission recommended early intervention and curriculum-based assessment practices and suggested changing SLD eligibility determination to a response model. Also in 2001, the National Summit on Learning Disabilities recommended RTI as the most promising method for learning disability eligibility determination (Bender & Shores, 2007). In 2002, similar recommendations were issued by the National Research Council Panel on Minority Overrepresentation and the National Research Center on Learning Disabilities (NRCLD, 2002). Benefits of RTI outlined in these reports included the efficacy of early intervention to prevent or reduce academic difficulties, the ability to rule out poor instruction as a cause of low achievement, more objective means of evaluation to reduce overrepresentation of minority students in special education, and the assurance of quality instruction resulting from the use of scientifically research-based strategies. As Congress began the process of reauthorizing the Individuals with Disabilities Education Act 1997 (IDEA 1997), members took notice of the recommendations and included RTI in the new Individuals with Disabilities Education Improvement Act of 2004. IDEA 2004 does not mandate the use of RTI for SLD eligibility. It does, however, permit its use and prohibits states from requiring the use of the significant discrepancy model (U.S. Department of Education, 2006).

The inclusion of Response to Intervention in IDEA 2004 has resulted in an enormous increase in discussion, debate, and research on the topic. School personnel have found themselves caught up in a widespread

debate over how to implement the procedure quickly but effectively. The RTI process seems destined to become labeled a “special education initiative.” And yet, the success of RTI relies heavily on the requirement that it be perceived and developed as a function of general education (L. S. Fuchs & Fuchs, 2007; Hilton, 2007). Indeed, it is our opinion that RTI can be successful as a tool for school improvement if, and only if, it is embraced by general education leadership at the state, local, and school levels. It must be developed into a vision for overall school improvement and integrated into every aspect of the school, including curriculum, assessment, scheduling, staff development, and allocation of resources. With that in mind, we will focus the remainder of this chapter and the next four chapters on RTI as a general education practice. This chapter will provide an in-depth discussion of the Standard Protocol and Problem-Solving Models. Chapters 2 through 5 will go into greater detail about specific components of RTI, such as assessment and research-based strategies. In Chapter 6, we will revisit the idea of utilizing RTI as a means of determining eligibility for and providing special education services. Chapter 7 will bring all components of the process together and provide guidance for developing a school or district implementation plan.

TWO MODELS FOR RTI IMPLEMENTATION

The Standard Protocol Model

As discussed in the previous section, the 1977 study by Deno and Mirkin evolved into what is commonly known as the Standard Protocol Model of RTI. The Standard Protocol Model, also referred to as Standard Treatment Protocol, is very similar to the three-tiered reading model described previously. In a Standard Protocol RTI, Tier 1 instruction involves effective implementation of the core curriculum for all students in the general education classroom. The classroom teacher utilizes benchmark assessment or other forms of curriculum-based measurement to assess his or her entire class for mastery of the core curriculum, usually in the area of reading or math. Students performing below a certain level are identified as being at risk for failure in the assessed area. Students are then placed into Tier 2, encompassing small group instruction that is in addition to the core instruction. The small group instruction is readily available to students and has been pre-established based on the most common needs of students in the school. The additional instruction involves a scientific, research-based strategy or curriculum specifically designed to address the students’ deficit areas. A goal is established that targets expected improvement. Curriculum-based measurement is administered

at regular intervals to evaluate each student's progress toward the goal. Instruction and assessment may be carried out by general education teachers, special education teachers, paraprofessionals, or others who have been trained in the instructional strategy or curriculum. In many Standard Protocol Models, instruction is delivered and evaluated for ten weeks, with the possibility of students participating in three or more of these ten-week sessions. Response to the intervention is operationalized with additional cut-points, which vary widely between studies. Students whose achievement is above the cut-point return to Tier 1, general instruction. Students whose achievement is below the cut-point may continue with the Tier 2 instruction or be referred to Tier 3, which usually involves intensive individualized instruction, often provided through special education (Graner, Fagella-Luby, & Fritschmann, 2005; Speece, Case, & Molloy, 2003; Vaughn et al., 2003). Movement up the pyramid involves more intensive instruction and progress monitoring with each additional level. The intent of the intervention is to remediate problems as soon as they are identified and to move students back down to a lower tier when they have exhibited positive response to the more intensive instruction. Figure 1.1 illustrates a Standard Protocol Model of intervention. Figure 1.2 goes into further detail, outlining the flow of activities in the model.

There is a wealth of information about and examples of Standard Protocol RTIs in the research literature. This model is preferred by

Figure 1.1 Standard Protocol Model

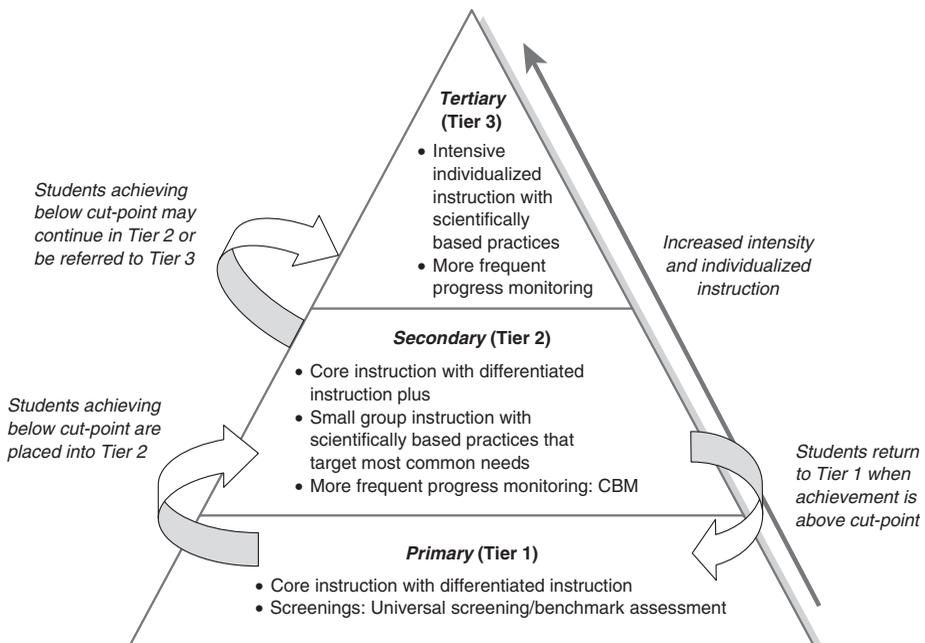
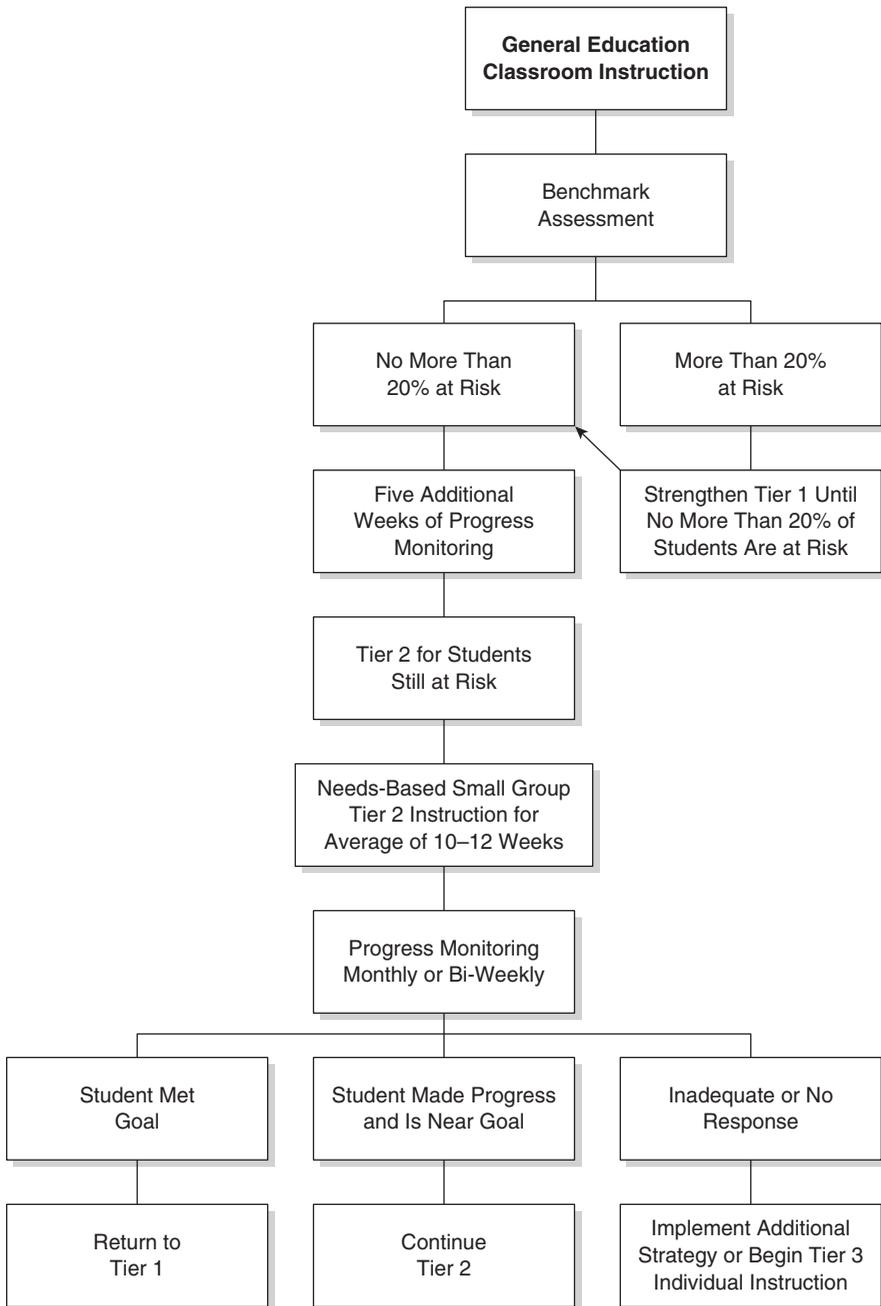


Figure 1.2 Standard Protocol Flowchart



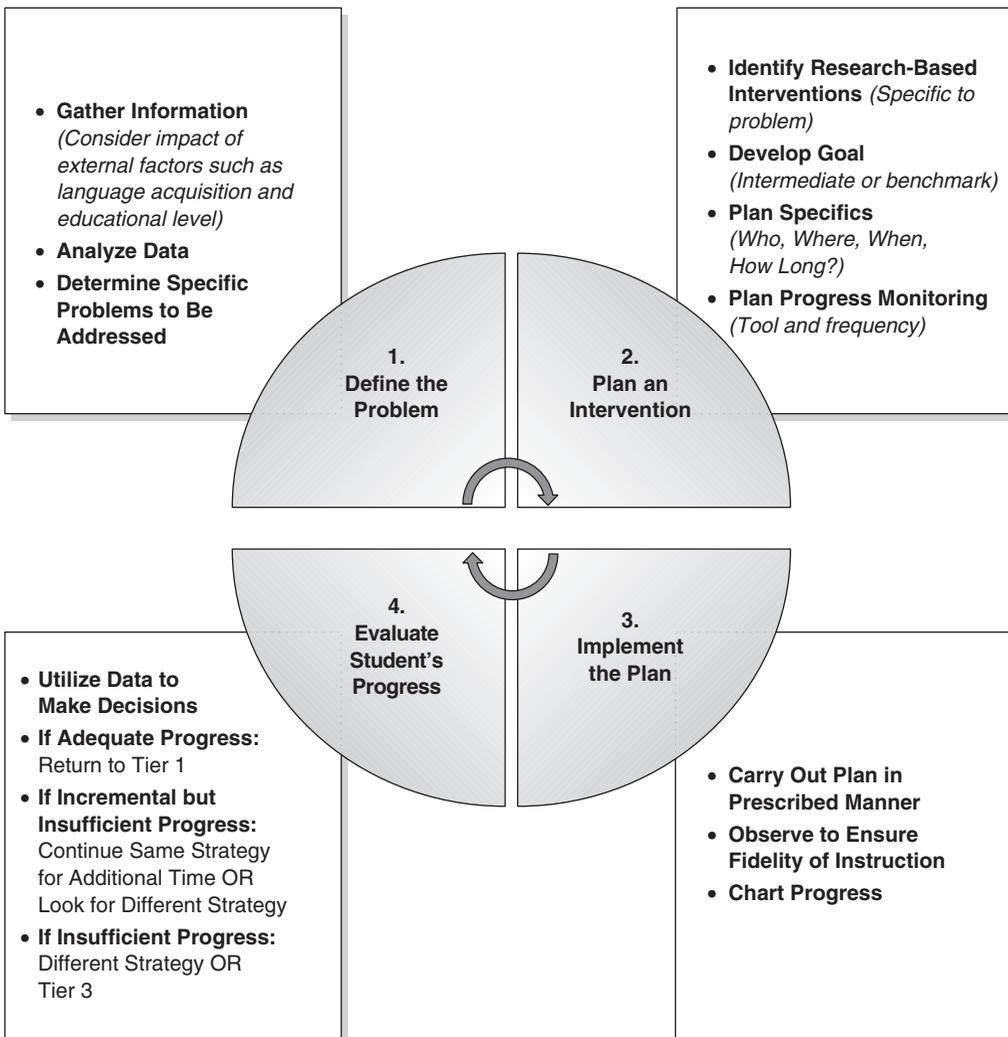
researchers because of (1) the ability to control variables, resulting in high-quality research data; (2) the use of scientific, research-based strategies; and (3) less need for a large variety of strategies to be used in the school, thereby increasing instructional quality or fidelity (Bender & Shores, 2007; D. Fuchs, Mock, Morgan, & Young, 2003). Yet, it is not without weaknesses. With this model, there is less flexibility with interventions. It is designed to provide interventions based on the needs of the majority of students. It does not allow for students who might learn differently and therefore may not respond to the particular intervention chosen. It also calls for considerable restructuring of the school's resources and procedures to allocate time for instruction in the intervention groups. Finally, it has been applied almost exclusively to students in grades K–3, with the majority of studies performed in the area of reading. Although this seems logical, given the Standard Protocol Model's roots in the three-tiered reading model and its goal of early intervention, the model may have significant limitations for application to other content areas or to older students.

In Chapter 4 of this book, we will discuss specific issues associated with school-wide implementation of the Standard Protocol Model. We will provide guidelines and examples in the areas of research-based strategies, fidelity of instruction, scheduling, and staff options. We will also provide an example of full implementation of the model at the school level.

The Problem-Solving Model

The second recognized model of RTI is the Problem-Solving Model, which developed from the Bergan (1977) study discussed previously. It is preferred by practitioners in the school setting in that it allows more flexibility with interventions and focuses more on the individual needs of the student. This model involves a decision-making process employed by a team of professionals who consider the needs of each child and develop strategies based on those specific needs. The team employing the process may be composed of teachers, administrators, school psychologists, or others who have knowledge of the student and/or strategies which might be implemented. This model has been applied to both behavioral and academic problems. When a student in the general education class is identified as at risk for academic or behavioral difficulties, the classroom teacher utilizes the problem-solving team to develop an appropriate RTI plan. Figure 1.3 illustrates the steps in the decision-making process. This figure should help you to see the thought processes involved in implementing this model.

Figure 1.3 Problem-Solving RTI Model



Step 1: Define the problem. Step 1 in this process begins as the team develops a clear definition of the student’s presenting problem, whether academic or behavioral in nature. Team members should first gather information related to the student’s functioning both within and outside the school setting. We believe this step is critical to the success of the remainder of the cycle. Experiences outside the school often play a definitive role in academic success (Maslow & Lowery, 1998). When students feel unsafe, when they feel hungry, or when they suffer distress due to other external causes, schoolwork falls low on their priority list (Sousa, 2001). In fact, home environment has been shown to be closely correlated

with early reading development (Vellutino et al., 1996). Teachers may not have control over external factors, but understanding their impact will enable the teacher to better communicate with and build a relationship with the student (Payne, 2005). Students who come from deprived, dysfunctional, or violent homes often demonstrate significant benefit from this deeper understanding on the part of the teacher.

If the team is implementing the problem-solving process for students from minority groups, specifically English language learners or African American students, team members should carefully explore factors that often lead to disproportionate placement of these students into special education. African American students are three times more likely to be labeled mentally retarded than Caucasian students (Council for Exceptional Children [CEC], 2002). Cultural norms and societal expectations within the student's culture are sometimes in conflict with the expectations of America's public schools. For example, in some cultures, it is considered disrespectful for children to make direct eye contact with adults. However, in American classrooms, teachers expect their students to make eye contact to show they are paying attention. Although this is a very simplistic example, more significant conflicts between expectations and cultural norms often result in high rates of disproportionality for subgroups of children (CEC, 2002).

When working with English language learners, problem-solving team members must consider the student's level of English proficiency. Cummins' Theory of Language Acquisition (1980) explored the difference between conversational English and academic English. Students who are conversationally proficient are often judged to have the skills necessary to be successful in school. However, many students may be able to participate fully in conversations in English and yet not understand the semantics, structure, and vocabulary of academic content. They are deficient in academic fluency. According to Cummins, academic English proficiency requires much more time for mastery: an average of five to seven years as compared with two years for conversational English. Without taking this into consideration, problem-solving teams may incorrectly determine that a student's learning problems are not associated with language acquisition.

In the case of an English language learner, the team should also consider factors such as the level of proficiency in the native language (Freeman & Freeman, 2004). Studies have shown a direct correlation between proficiency in other languages, especially Spanish, to English acquisition (Klingner & Artiles, 2003; Ordonez, Carlo, Snow, & McLaughlin, 2002; Vaughn, Mathes, Linan-Thompson, & Francis, 2005). Therefore, teams should learn as much as possible about the student's school history prior

to education in the United States. If a student never had formal training in the structure of his native language, he has nothing with which to compare the structure of English. Additional factors that may affect student achievement include medical history, psychological stressors such as separation anxiety or post-traumatic stress disorder, and willingness to accept the American culture (Bender & Shores, 2007; Marler & Sanchez-Lopez, 2006). While it is true that the data-based nature of the RTI process often reduces subjectivity in special education referrals, it would be a mistake to ignore the impact of these external factors (Davis, Lindo, & Compton, 2007). A team's lack of understanding of these issues may very well lead to inappropriately determining that the student is non-responsive and thus in need of special education. (See Bender & Shores, 2007, pp. 67–81 for a full discussion of RTI's impact on students from minority groups and children from poverty.)

Another important task to be completed in step 1 is to analyze all relevant data. In Chapter 2, we will discuss in detail the components and uses of formative and summative assessment. It is important to utilize both types of assessment in order to develop an overall picture of student functioning. Summative data allows the members of the team to visualize the overall strengths and weaknesses of the student, while formative data allows them to see how the student functions on a daily or weekly basis and how the student has responded to regular classroom (Tier 1) instruction. This data may be the outcome of benchmark assessments, curriculum-based measurement, standardized criterion-referenced or norm-referenced test results, end-of-chapter tests, end-of-course tests, or a variety of other options. It may be as simple as the results from Exit Cards (also called “tickets out the door”), a brief informal assessment procedure.

The team reviews the available data to develop a picture of the student's functioning, being as specific as possible when determining the cause of the difficulty. For example, the team may determine that the student is functioning in the lowest 20 percent of the class in reading fluency with a score of 15 words per minute on the reading fluency assessment. This provides useful information with which the team can develop a specific goal and strategy. If the team simply said “Johnny can't read” or “Johnny reads below grade level,” additional assessment would be needed before a measurable goal could be developed.

Step 2: Plan an intervention. After the student's specific cause of difficulty is identified, the team is ready to plan an intervention designed to address the problem. As we discussed earlier, interventions utilized in the RTI process must have a substantial research base. There are many strategies and curricula available that meet this criterion, and we will go

into greater detail about research-based interventions in Chapter 3. There are several issues, however, that we will address now which the problem-solving team must keep in mind.

First, the intervention must specifically address the identified problem. Traditionally, problem-solving RTIs have been found to involve poor-quality interventions (D. Fuchs et al., 2003). Our own experience with the problem-solving process has verified this in that the most common interventions chosen included preferential seating, reduced workload, and increased time to complete assignments. These are not research-based strategies, and they are not specifically geared toward teaching the student a skill. Problem-solving team members must turn to the research literature and independent evaluations of curricular programs to determine which interventions are most appropriate for their students.

Secondly, teachers, paraprofessionals, or other practitioners who are implementing the intervention must be properly trained in its implementation. Whether the intervention is a strategy or a supplemental curriculum, it will have specific guidelines and procedures that must be followed. If these guidelines and procedures are not carefully followed, the research base that substantiated the intervention is no longer valid.

After identifying an appropriate strategy, the team must develop a goal for the student. This goal may be based on expected benchmarks, the functioning level of the remainder of the class, or an incremental step between the student's current functioning and the benchmark. For example, Kade, a first-grade student, reads 20 words per minute according to the reading fluency assessment of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). The expected benchmark for his class is 40 words per minute. The problem-solving team may decide to implement a specific strategy for ten weeks. The team may set Kade's goal at the benchmark (40 wpm) or may set an intermediate goal, making the required growth rate more manageable. The team decides to set an intermediate goal for Kade at 30 words per minute by the end of the ten-week intervention. If Kade achieves this goal, it would be expected that the strategy would continue for another ten weeks in order to attempt to reach the benchmark of 40 words per minute.

After developing the goal, the team must determine specifics involved in implementing the intervention. Team members must determine the following:

- Who will carry out the intervention (teacher, paraprofessional, or other personnel)
- Where the instruction will occur (general education classroom, separate small group, individual tutoring, etc.)

14 • Using RTI for School Improvement

- When instruction will take place (time of day, number of days per week)
- How long the intervention will be implemented (minutes per day, number of weeks)

Each of these components, once established, will have an impact on the outcome of instruction. For example, if the instruction is supposed to take place for 30 minutes three times per week, but instead is only implemented for 20 minutes two times per week, the outcome could be heavily affected.

Finally, the team must determine how and how often to assess progress. Curriculum-based measurement (CBM) tools are used to assess academic progress in the areas of reading and math particularly (see Chapter 2 for an extensive discussion of curriculum-based measurement and progress monitoring). The team should choose an appropriate CBM tool that will provide valid data of incremental steps of student progress. The team should then decide how often the student will be assessed. An important point to remember is that the more often the CBM assessment tool (also called probe) is administered, the more data will be available to the team. Each score obtained when a CBM assessment tool is given is called a data point. Four data points collected during a ten-week intervention will give only a vague picture of the student's progress. Ten data points during the same time frame will provide a much more detailed picture of incremental and minute positive or negative responses to instruction.

Step 3: Implement the plan. After the team has developed an intervention plan containing all of the elements outlined above, the next logical step is to implement the plan as it was designed. If the RTI plan is well developed, with careful thought given to details, plan implementation is usually quite simple. Instruction should occur in the prescribed manner, with careful attention given to making sure the intervention is implemented just as it was in the research. This component is known as fidelity of instruction. The team should designate one member to monitor the instruction and ensure that it is implemented with fidelity. This most often takes the form of a brief observation conducted by someone who is knowledgeable about the intervention. Some published curricula include a fidelity checklist or listing of required components that can easily be converted into a checklist. Otherwise, the observer can make anecdotal notes verifying appropriate implementation. The notes from this observation become part of the data used to rule out lack of instruction as a reason for poor response to the intervention. It simply documents that the intervention that has been proven effective for students with the specified problem was

implemented correctly and found to be ineffective for this particular student.

As the intervention is implemented and progress monitoring takes place, the data generated by the progress monitoring should be charted in order to develop a picture of progress. Charting of data can easily be accomplished with chart paper or computer programs designed for the purpose. This chart will allow the team to quickly determine whether or not the student is exhibiting adequate response to the intervention.

Step 4: Evaluate the student's progress. The final step of the problem-solving process is to utilize the data to make instructional decisions for the student. Team members should consider all aspects of the plan implementation and analyze the CBM data so the team can determine whether or not the student has made adequate progress. Our recommendation for determining progress is to use a method called dual-discrepancy formula, in which the team considers the student's starting and ending performance (slope) as well as the student's end point in comparison to the goal (level; D. Fuchs & Deshler, 2007). Based on the student's progress toward the goal, the team must make a determination of the next step.

As the problem-solving cycle is applied, students progress through a multi-tiered pyramid as they did in the Standard Protocol Model in order to provide more intensive interventions and progress monitoring when needed. The team uses the cycle to develop an intervention plan, and the plan is implemented as designed. If the student showed a positive response to the instruction but did not reach the goal or benchmark, the team may decide to continue the same intervention for an additional time period or may increase the intensity of the intervention by implementing it for a longer session length or more days per week. If the student showed little or no response, the team may try a different intervention or move the student to the next tier of the pyramid. Of course, if the student responded well and reached the goal or benchmark, the team would most likely place the student back in general education in Tier 1. Regardless of the outcome, the team must make its decision based on the data.

The Mixed Model

An option that we often recommend and which some state and local agencies are choosing is one that incorporates both models within a school. With this option, the Standard Protocol Model is chosen and implemented to address the most common academic problems in the school. For example, review of the end-of-year standardized assessment might reveal that most kindergarten students with reading problems are

weak in the area of phonemic awareness. The school or district administrators should first examine their core instruction in phonemic awareness to substantiate that students are provided appropriate instruction and given adequate opportunity to learn. They should substantiate that the majority of students are making acceptable progress with this core instruction. Next, they may choose one or more Standard Protocol interventions designed to teach phonemic awareness. They may then schedule for needs-based instruction during the school day, where when a student is identified as deficient in phonemic awareness, he or she can immediately be placed into an intervention group. The Standard Protocol RTI Model would then be followed.

At the same time or following the establishment of these intervention groups, the school or district would train its teachers in the Problem-Solving Model, perhaps developing a core team to assist with implementation. When students are identified as having academic difficulties not related to the deficiencies addressed through Standard Protocol, or when a behavior problem arises, the Problem-Solving Model would be implemented and decisions would be based on students' individual needs. With each model, care should be taken to rely on scientific, research-based interventions, progress monitoring data for decision making, and attention to fidelity of instruction (Hollenbeck, 2007).

This mixed model provides the advantage of having an established intervention available to students as soon as they are identified as having the most common learning problems. Additionally, it may ensure greater fidelity of instruction due to the fact that limited interventions are used. At the same time, students who have different needs can still receive appropriate intervention. Planning for this type of structure will vary by school, depending on available resources and instructional needs.

Cautions Regarding RTI Implementation

We have devoted much more time to discussion of the Problem-Solving Model than to Standard Protocol. Our reasons for this are simple. First, the Problem-Solving process has a history of mediocre or poor implementation. Numerous states have used the process for many years with some success. For example, Minneapolis Public Schools has implemented the model in all of its schools, grades K–12 (Marston, Muyskens, Lau, & Canter, 2003). Heartland Area Educational Agency has implemented the Problem-Solving Model in a majority of its service area schools in Iowa since 1985 (Tilley, 2003). Pennsylvania's Instructional Support Teams, established in 1990, utilize this model as well. Yet there is little empirical data that the Problem-Solving Model has been effective as

a tool for early intervention. Specifically, there is little evidence that interventions are implemented with fidelity or that they are effective in remediating or eliminating the presenting problem (D. Fuchs & Deshler, 2007; D. Fuchs et al., 2003). There is also little evidence that student data has been generated and utilized for instructional decision making. In essence, the Problem-Solving Model has a limited research base for treatment of academic problems (D. Fuchs & Deshler, 2007). And yet, as we mentioned earlier, this model is the one that is preferred by practitioners and seems to be the most commonly chosen model for RTI implementation. Therefore, we feel we must place greater emphasis on the components that can make the process successful. Schools and school systems should exercise caution in moving full-force into this model. An enormous amount of planning, staff development, and reallocation of resources is required to put the essential elements in place that will promote effective Problem-Solving RTI implementation (Tilley, 2003). Extreme care must be taken in ensuring fidelity of treatment implementation (D. Fuchs & Deshler, 2007).

RTI IMPLEMENTATION OUTSIDE OF THE ELEMENTARY SETTING

Our discussion thus far has presented models for RTI implementation that have a strong research base for implementation in elementary schools. Research data on RTI in grades 6–12 is extremely limited. This is not surprising, given that RTI is designed as a tool for early intervention. However, most states are requiring implementation in grades K–12. This leaves teachers and administrators in a quandary as to how to apply recommendations for elementary best practices to the secondary school setting. Although there are good examples of implementation at the secondary level (e.g., Minneapolis Public Schools), there are few recommendations in the literature that are specific to this level. Because the overall school structure is so different from the earlier grades, many RTI features do not translate well to the middle and high school settings.

The reality of the situation is that many students at the secondary level will need intensive interventions to address a variety of problems, including poor reading and math skills. In 2004, it was reported that 68 percent of eighth-grade students and 64 percent of high school seniors failed to attain the level of proficient reader (Deshler, 2004). Reasons for this include lack of appropriate instruction in the primary grades, the difficulty of content area work, the cumulative effect of problems that were not as significant in the early grades, excessive absenteeism resulting in acquisition of splinter skills, and the presence of significant behavior problems

that impede the student's learning (Hughes & Deshler, 2007). The focus on reading at the secondary level shifts from *learning to read* to *reading to learn*; students who were successful readers in the earlier grades may be deficient in reading *comprehension* (Biancarosa & Snow, 2006). It is improper, then, to assume that all students who are going to have difficulties through their school careers will be identified and remediated in the primary grades.

RTI implementation in middle schools can often be accomplished by adapting many of the practices in place in the elementary grades. Middle schools are usually structured so that students spend most of their day with a team of teachers. The middle school concept was developed in order to provide added support for students in the transitional years from elementary to high school. This team concept allows teachers to get to know their students better and to track their progress on a regular basis. We find that many schools are adjusting their current structure to fit within the RTI framework.

However, the situation is much different at the high school level. Because of the departmental structure of typical high schools in the United States, teachers have limited contact with their students. That contact usually occurs in sixty- to ninety-minute blocks of instructional time. A teacher may see an individual student only once daily or, in some cases, every other day. As a result, there may be no mechanism for identifying and supporting at-risk students. This is clearly illustrated in the statistical phenomenon known as the "ninth-grade bulge." According to a study of high school progress, the promotion rate between ninth and tenth grades is lower than the rate between any other grades. This results in a larger freshman class than any other class in eighth through twelfth grades. Additionally, the study found that a large number of students who failed freshman classes eventually drop out of school (National High School Center, 2007).

In order to address this and other instructional issues, schools must redesign their infrastructure to provide opportunities for supplemental and intensive intervention (Biancarosa & Snow, 2006). They must arrange for support systems, including extended learning time, amid the demands of high school graduation requirements. As a result, the concept of RTI implementation as a school improvement process is perhaps more important at the secondary level than in the earlier grades.

High school faculties must develop a vision of RTI as a school improvement process and realize its application to their students. This begins as the administration seeks to orient the faculty and staff to the concepts of curriculum-based measurement, progress monitoring, and differentiation of instruction. High school teachers often express frustration when faced

with the concept of differentiating instruction while maintaining high standards.

Most secondary teachers are unaware of the concepts of progress monitoring. The logical reason for this is the absence of curriculum-based measurement tools applicable to older students. There are very few standardized curriculum-based assessment tools designed specifically for use with adolescents.

With these issues in mind, we now look at the unique challenges involved in RTI implementation at the secondary level. We will offer options for structuring the process at both the middle and high school levels. Throughout the remainder of the book, we will provide examples of strategies and assessment tools appropriate for adolescents.

Middle School and Junior High School Implementation

The Standard Protocol Model is being utilized successfully in middle and junior high schools in the same way as in our earlier description. School-wide assessment data is analyzed and the most significant areas of need are identified. Reading skills, reading comprehension, and math computation and problem solving are the most common areas for intervention. Standard Protocol intervention groups are then formed based on these areas of need. Schools often incorporate needs-based instruction or extended learning time into their vocational or special area segments (also called connections or exploratory). Students receiving Tier 2 interventions are placed into targeted assistance groups during these segments. Progress monitoring is implemented using tools appropriate for the grade level.

The Problem-Solving Model is also widely used at these grade levels. Teams are formed to address students' needs and develop intervention plans. Interventions may be carried out in small groups within the content area classroom or in small group settings.

As we stated earlier, implementation at the middle school level often involves adapting procedures from elementary models. Benchmark assessments may be administered three times per year or every six to nine weeks. The problem-solving process is applied through team meetings involving all teachers who teach the student. Schools with the junior high structure (similar to traditional high school structure) face more of the challenges experienced by high schools and may need to look to secondary models for process development. Without the team concept in place, scheduling becomes a bigger issue. However, as already mentioned, progress-monitoring tools are available for students in these grades.

High School Implementation

As more secondary schools begin developing the RTI process, we see two distinct structures emerging. Both structures contain the foundational characteristics of the RTI models already presented: research-based interventions, progress monitoring, and attention to fidelity of instruction. Students may move between tiers in the same manner as in previously discussed models. What differs between the structures is the direction they take in identifying and remediating student weaknesses. One structure addresses student deficits in basic skill areas, specifically reading comprehension. The other structure addresses weaknesses in actual content knowledge: literature/language arts, mathematics, science, and social studies. We will explore both of these options and present recommendations for implementation.

Basic Skills Structure

Let us begin by examining the first structure, built around student achievement in basic skill areas. In this model, students' performance on general outcome measures, including criterion-referenced tests, high school entrance/placement tests, and/or basic skills tests, is examined. These assessment tools are used as benchmark assessments and identify students who are considered in the deficient range in reading skills and comprehension. The cut-point for deficiency or at risk may be established by the state or district, or it may be standard for the assessment tool. The reason for the focus on reading, specifically comprehension, is that this skill is critical to success in secondary content classes. Students must possess very complex reading skills in order to learn information from content text. These skills include the ability to read with purpose, the ability to glean information and learn from text, the ability to discern meaning of words in context, the ability to discern fact from opinion, and the ability to integrate new information with background knowledge (Biancarosa & Snow, 2006). Students must use these abilities in narrative, expository, technical, and persuasive writings. Students who are deficient in these basic comprehension skills are likely to struggle in content classes.

Tier 1 in this model involves instruction to all students in the general education classroom. Students who are identified as having deficient skills are provided intensive Tier 2 interventions. Tier 2 interventions are carried out in extended learning time provided during and/or outside the school day. These interventions focus on improving broad skills, such as reading comprehension, needed to succeed in content area classes. They

often focus on teaching students specific learning strategies that can be used in most or all classes. These strategies are then embedded in the teaching processes used in the content classes. As content teachers overtly demonstrate and utilize the strategies, students are able to generalize them to applicable uses. Frequent progress monitoring is utilized to track student progress. Students are then moved through the pyramid based on their responsiveness to the interventions.

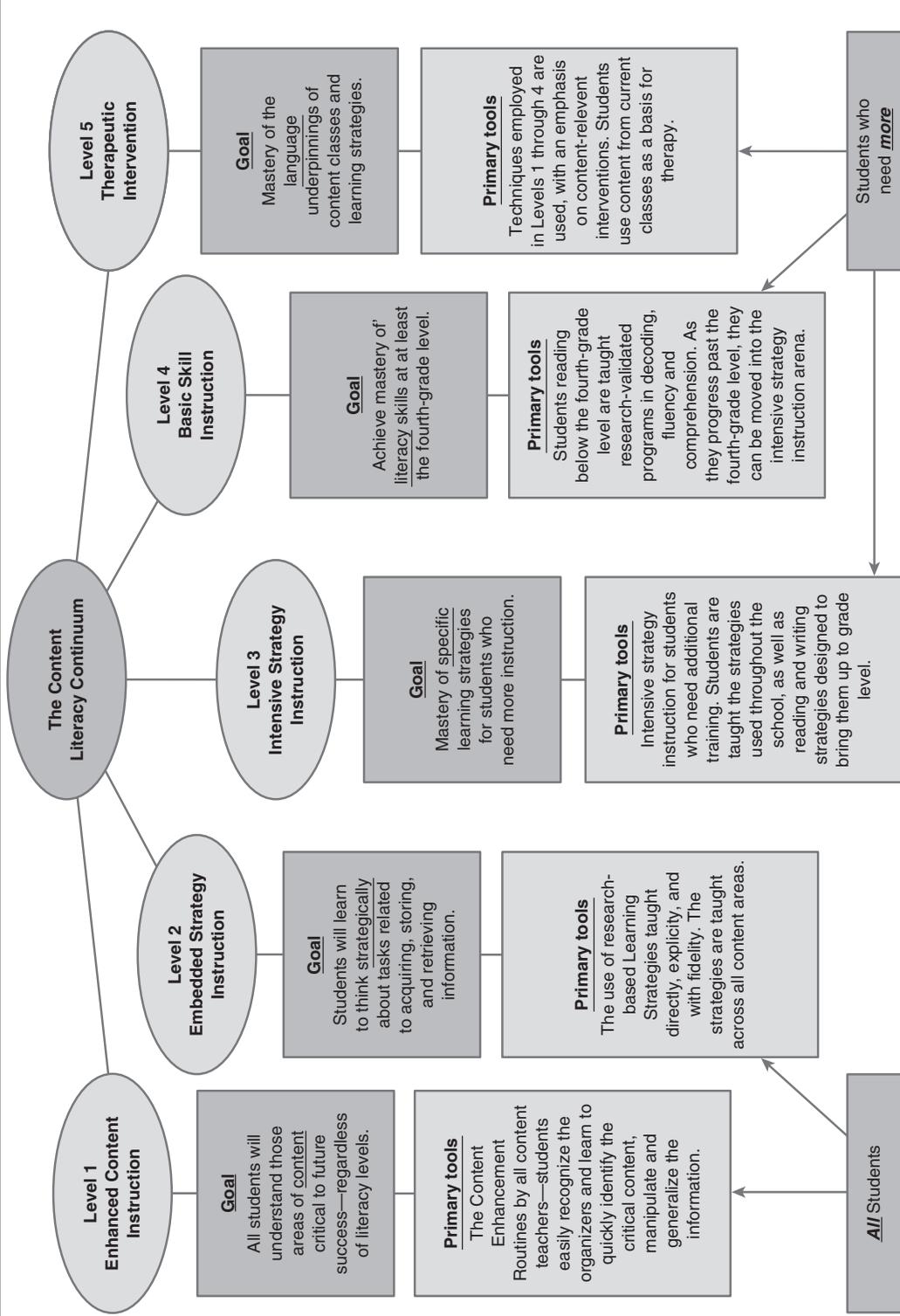
Hughes and Deshler (2007) proposed a model of RTI of this type based on the Content Literacy Continuum (CLC) developed at the University of Kansas Center for Research on Learning. The CLC looks at the skills necessary to learn in each of the content areas. It seeks to answer the following questions about literacy supports available to struggling students:

1. What happens for those students who are reading below the fourth-grade level?
2. What is in place across a school staff to ensure that students will get the “critical” content in spite of their literacy skills?
3. What happens for students who know how to decode but cannot comprehend well?
4. What steps have been taken to ensure that powerful learning strategies are embedded across the curriculum?
5. What happens for students who have language problems? (Hughes & Deshler, 2007)

The continuum answers these questions through five levels of support, beginning with enhanced content instruction and embedded strategy instruction in the general education classroom. For students who are still unsuccessful, the school then provides intensive strategy instruction through strategy classes and/or strategic tutoring. Students may also receive intensive basic skill instruction as needed. Finally, students who prove unresponsive to previous interventions are provided with therapeutic intervention, perhaps by a speech/language pathologist. The continuum is illustrated in Figure 1.4. (For a full description of the process, visit www.kucrl.org or www.smarttogether.org/clc.)

In the RTI model based on the CLC, schools preface RTI implementation with extensive staff development for all content teachers on effective practices in reading and comprehension of academic texts and vocabulary/concept development. It is very important to develop a framework in which all teachers understand that they each play a vital role in literacy. Additionally, teachers are trained in curriculum-based measurement processes, such as maze assessments, and research-based strategies proven effective with older students (Hughes & Deshler, 2007).

Figure 1.4 The Content Literacy Continuum



SOURCE: © The Strategic Learning Center.

Tier 1 involves implementation of the effective reading practices in content classes. All students are screened for deficiencies in word analysis skills, fluency, and comprehension. If that information is available through state assessments, those results are used. If not, students are screened through some form of general outcome or curriculum-based measurement. Levels 1 and 2 of the CLC are implemented within the content area classes.

Students identified as at risk move to Tier 2 of the RTI pyramid. They receive intensive supplemental instruction in comprehension, vocabulary, and word-level skills, and teachers facilitate strategy use in the content area classes. Research-based interventions such as learning strategy instruction, study guides, graphic organizers, and class-wide peer tutoring are implemented in the content classes. These interventions are based in Levels 3 and 4 of the Content Literacy Continuum. Support to the general education teacher is provided by a support teacher, but again, the interventions are “embedded” in instruction in the general education classroom. Finally, in Tier 3, students who prove unresponsive are given intensive strategy and/or skill instruction in small group settings in subsequent tiers (Hughes & Deshler, 2007; University of Kansas Center for Research on Learning, 2007).

It is evident that this model requires a focus on climate change within the school. Roles and responsibilities must be redefined, and faculty members must think “outside the box” to develop a structure that will fit within federal and state course and graduation requirements. It requires changes in scheduling, as well. However, it holds great promise in providing intensive skills instruction designed to address significant reading comprehension issues. Because the model is based on literacy instruction, it does not address deficiencies in math abilities. Our next model may prove more applicable in that area.

Content-Specific Structure

The second structure that we see emerging across the country is one based on content-specific skills. All students are assessed using benchmark assessment tools (usually developed at the state or district level) that measure progress in all content classes. The benchmarks are administered at the beginning of the semester, at the midpoint, and at the end. Students who fall significantly below the benchmark are provided with Tier 2 interventions designed to teach learning strategies and address content skill deficits. The interventions may be carried out in extended learning time through computer-assisted instruction, direct instruction in elective

classes, or afterschool learning programs. Curriculum-based measurement is used for progress monitoring on a biweekly or weekly basis. Students move up and down the RTI pyramid based on their responsiveness to the interventions.

A key component of this structure, which may also be incorporated into the Basic Skills Structure, is the provision of extended learning time. This concept is being applied in numerous high schools across the country through credit recovery programs, virtual (online) classrooms, and extended day/year programs. In a report prepared for the Center for American Progress, Pennington (2006) identified several principles key to using extended learning time in high schools. These include providing a variety of support services for students who struggle. She stressed that providing additional time cannot, in and of itself, raise achievement. The instruction provided during that time must be different from previous instruction, provide extra support while maintaining high expectations, and engage students in the learning process. As school personnel develop extended learning time options within their schools, they should avoid the creation of traditional remedial-type classes. Groupings should be based on specific student needs. Group size should be kept small. Specific research-based interventions should be implemented with fidelity. Progress monitoring should be used to effectively drive instruction.

Figure 1.5 gives several resources for RTI implementation in the secondary levels. As more schools implement the process, we will undoubtedly see many variations on the structures listed above, and other structures will develop based on the needs and resources of individual schools and districts. We encourage secondary school staff to apply the concepts of an effective RTI process and current research on effective secondary practices to their overall vision of school improvement in order to create a uniquely successful plan.

Figure 1.5 Resources for Secondary RTI Implementation

- University of Kansas Center for Research on Learning
www.kucri.org
 - National High School Center
www.betterhighschools.org
 - Center for American Progress
www.americanprogress.org/issues/2006/10/pdf/extended_learning_report.pdf
 - Research Institute on Progress Monitoring
www.progressmonitoring.net/CBM_Sec_Res.doc
-

RTI MODEL FOR BEHAVIORAL INTERVENTIONS

As has been discussed, the Problem-Solving Model originated from a behavioral research study and has been recommended as the model to use to address behavioral problems (D. Fuchs & Deshler, 2007). Because implementation for academics involves so many specific factors, we have until this point presented the model with academic examples of interventions and progress monitoring. The model is easily applied to behavioral interventions. In doing so, the basic structure is the same as one for academic deficits. It still includes research-based interventions, progress monitoring, and observations for fidelity of instruction. As we examine the model more closely, we will highlight similarities to and differences from the previously presented academic models.

Tier 1—School-Wide and Class-Wide Interventions

In a Problem-Solving Model for behavioral issues, Tier 1 involves use of a social skills curriculum focused on the behaviors necessary for success in the general education environment. This may be implemented through the use of class-wide or school-wide behavioral plans, such as Positive Behavioral Interventions and Supports (PBIS; Sandomierski, Kincaid, & Algozzine, 2007; Sugai, Horner, & Gresham, 2002). PBIS has been implemented in schools throughout the United States and has been found to provide effective behavior management in preschool through secondary settings. Its focus is to reduce and prevent inappropriate behavior by teaching and reinforcing appropriate behavior.

The Tier 1 plan should establish and teach expectations, provide reward systems for compliance, and provide consequences for noncompliance. Through its implementation, teachers should be able to manage minor behavior occurrences and implement interventions to increase active engagement (Barnett et al., 2006).

The Tier 1 behavior plan, when implemented with fidelity, should be generally effective for approximately 80 percent of the class. In order to ensure this, leadership teams may review discipline records to identify classes in need of assistance. Classrooms in which large numbers of students receive discipline referrals or engage in off-task or aggressive behaviors should be carefully examined for effective behavior management practices. Just as with academic interventions, it is only after this effective practice has been verified that you should begin looking at non-responders (Sandomierski, et al., 2007).

Students who experience significant behavioral difficulties despite the PBIS implementation may be identified through universal screening

consisting of teacher observation, behavior checklists, and review of discipline referrals. This does not, however, identify students who exhibit withdrawing behaviors. According to Sandomierski and colleagues (2007), there are currently no standardized behavior screening measures that fit this description. Until such tools are developed, schools must continue to use the tools such as those listed above.

Tier 2—Targeted Interventions for Tier 1 Non-Responders

The problem-solving team process is applied in order to clearly define the problem behavior and develop an intervention plan. The team makeup might be identical to that used for academic interventions, but the team could also include behavior specialists, positive behavioral support (PBS) coaches, school counselors, or others with expertise in behavior management. The team should explore whether external factors may be contributing to the behavior problems. This information may be obtained through social histories, parent interviews, parent questionnaires, and physicians' reports (Barnett et al., 2006). The team should also consider whether behaviors might be a response to academic deficiencies—in other words, whether frustration or embarrassment the student experiences over inability to complete assignments is causing outbursts of bad behavior. In one PBIS project school, team members found that over 80 percent of students referred for severe behavioral problems also experienced academic problems (Sandomierski et al., 2007). Students may receive Tier 2 interventions for both academic and behavioral problems simultaneously. In such cases, teams should carefully evaluate and monitor the relationship between behavior and academic functioning.

Behavior observations that document antecedent-behavior-consequence are very helpful in analyzing and monitoring behavior problems and progress (Crimmins, Farrell, Smith, & Bailey, 2007). By carefully documenting and considering the setting, time frame, frequency, duration, antecedents, and consequences of behavior, teams can begin to identify patterns, which leads to effective interventions. Resource D of this book provides an example of a behavior documentation form of this type.

Based on all available data, the team would then design an intervention plan containing proactive, evidence-based behavioral interventions designed to keep the behavior from occurring and break undesirable behavior patterns. Direct instruction of interventions might be carried out one-on-one or in small group settings. Interventions may also be embedded in classroom procedures modified for individuals or groups of children. Group interventions might include social stories (Gray, 2000), social curriculum (Joseph & Strain, 2003), or group counseling (Corey,

1990; Sanders, 2007; Sandomierski et al., 2007; Utay & Lampe, 1995). Additionally, individual interventions such as self-monitoring, daily behavior report cards (Chafouleas, McDougal, Riley-Tillman, Panahon, & Hilt, 2005; Fairbanks, Sugai, Guardino, & Lathrop, 2007), and token economies (Sprick, Garrison, & Howard, 1998) may be implemented within the general education classroom. As stated earlier, the strategies should be proactive and serve the purpose of preventing, eliminating, or replacing undesirable behaviors. Sending students to “time out,” the office, or home rarely has a positive impact on behavior change.

Progress monitoring may include careful documentation of the frequency and duration of the targeted behavior in various settings based on the incidence of the original behavior. Behavior checklists, teacher rating scales, and anecdotal records may also be used, along with continued monitoring of discipline referrals. The team must determine a cut-point, or decision rule, that will identify when the student has made sufficient or insufficient progress (Barnett et al., 2006). These decision rules should clearly define what is considered acceptable or unacceptable progress. Short- and long-term goals should be established for the student. After implementation begins, the team will analyze the data to make instructional decisions about responsiveness to the strategy.

Tier 3—Intensive Individualized Interventions for Tier 2 Non-Responders

When students are unresponsive to Tier 2 behavioral interventions, the team must employ more intensive assessment and interventions, in Tier 3. This may be accomplished through closer analysis of previous data and through functional behavioral assessment (FBA; Barnett et al., 2006). FBA seeks to determine why the student is behaving as he or she is. It helps the team to determine how external factors and student characteristics interact to influence the child’s behavior (Crimmins et al., 2007). Students at Tier 3 may also be referred for further evaluation to determine the existence of disabling conditions. Just as with academic models, inclusion of special education services at this level will depend on state and local policy. Regardless of whether the child is served within or outside of special education, intensive, individualized research-based interventions should be implemented as part of an overall plan for behavior improvement.

A key component of the behavioral RTI model, as with the academic model, is to have flexible movement up and down tiers. When problem behaviors diminish, students should move back to less intensive interventions whenever possible. Barnett and colleagues (2006) proposed that

initial implementation of all tiers simultaneously might be suitable for children with extreme behaviors. In this case, the team should develop a comprehensive plan that includes intensive interventions. As behaviors diminish, interventions are phased out and the student moves to a lower, less intensive tier.

Throughout subsequent chapters, we will present many interventions and examples of RTI implementation for behavioral issues. As with all RTI models, leadership teams should begin with Tier 1: effective instruction and management for all students. When they can verify that this is in place, development of subsequent tiers can proceed.

Partnering With Parents (Chapter 1)

Parents can bring a unique perspective to the RTI team. After all, parents are teachers too—they have been teaching their children since well before they entered school and will continue to teach them until well after they leave school. Combining expertise and varying perspectives increases student achievement as you focus efforts on a common goal. The goal is helping our children to learn.

As you endeavor to implement the RTI process, it is crucial to involve parents at all tiers. Attempts to increase involvement must be more than token gestures. You must make real efforts to inform parents and include them in all aspects of your school program.

Some teachers have the perception that families do not want to be involved, when in fact many simply do not know how to be involved. It is also the case that some parents have the perception that they are not welcome at school—often as a result of their own negative school experiences. Yet, parents and schools both typically want to increase involvement.

Many parents and other concerned adults, such as physicians and mental health professionals, do not truly understand the pyramid of interventions. Often, we see well-meaning but uninformed non-educators fighting the system. The importance of teamwork to a winning game is obvious to everyone in endeavors such as basketball; however, in education, we often forget to work together as a true collaborative team. We believe increasing two-way communication is the best way to create a truly effective team.

There are several ways to communicate the overall RTI process to parents and community members. The student handbook is an obvious method for educating parents. It should provide a clear description of the process. Parent-friendly notices describing the process and how it addresses the needs of all learners is also beneficial. Communication can also be increased through e-mail, interactive phone systems, communication notebooks, newsletters, and meetings. To know the most *effective* method of communication takes knowing your community of parents. It may be necessary to meet at various times of the day and at various locations in the community to truly achieve school and family collaboration.

Throughout this book, we will discuss the importance of partnering with parents as we endeavor to include them as part of the team.

SUMMARY

Response to Intervention is a process that may be used for the identification of learning disabilities in students of all ages. We believe RTI has the potential to have more substantial effect for all students when it is incorporated into a school improvement process. The Standard Protocol Model, the Problem-Solving Model, and the mixed model are all ways to structure the process for school-wide implementation. The process will vary by school structure and grade level. Thus far, we have given you a brief overview of each model. Throughout subsequent chapters, we will go into great detail about the components of effective RTI implementation and will provide recommendations for implementation as a tool for school improvement.

REFERENCES

- Barnett, D. W., Elliott, N., Wolsing, L., Bunger, C. E., Haski, H., McKissick, C., et al. (2006). Response to intervention for young children with extremely challenging behaviors: What it might look like. *School Psychology Review*, 35(4), 568–582.
- Batsche, G., Elliott, J., Graden, J. L., Grimes, J., Kovaleski, J. E., Prasse, D., et al. (2006). *Response to intervention: Policy considerations and implementation* (4th ed.). Alexandria, VA: National Association of State Directors of Special Education.