



RTI Roundtable - Issue # 4

School Capacity to Adopt RTI

What Basic Decisions Should a School or District Make Before Implementing RTI?

After the initial commitment is made, a school or school district must focus on implementing initial and sustained professional development for teachers on the five critical components of early reading. Other issues, no less important, that must be discussed and resolved include how to optimize the use of staff time and student time, how to provide the materials necessary for scientifically based core instruction and targeted intervention, how to ensure funding, and how to provide ongoing leadership and support as RTI is established in the school and district.

Before implementation of one of the many RTI models can begin in a district, several basic decisions must be made about the structure and components to be selected, as well as how students will move through the process.

Selecting Structure and Components. The most basic decision is selecting and defining the specific structure and components of the service delivery system that will be used. Current RTI implementation models use a generally similar structure with some common components, but they also show variations. Some initiatives include relatively rigid tiers, while in others the number of tiers varies in different school districts, depending on resources and other factors. For example, a district might adopt a “standard protocol” model with two fairly rigid tiers (e.g., a single type of remedial program as the sole basis for assessing RTI) or a multitiered model having three more flexible tiers. The model and components selected will influence the personnel, resources, and decision-making processes to be implemented.

Balancing Rigidity and Flexibility. As RTI models become more widely implemented in schools, questions are being raised about the degree of rigidity or flexibility built into the implementation. A relatively stable framework involving greater consistency across schools, districts, and states may increase the opportunity and likelihood that successful models can be researched and replicated. On the other hand, flexibility in timelines and structure can be more responsive to the uniquely individual needs of students with LD and maximize problem-solving opportunities.

That flexibility requires staff with a broad range of skills and competencies and who are comfortable in a less structured environment. The flexible approach also makes both meaningful research and replication more problematic. The flexibility–rigidity decision can be expected to affect the degree of student individualization, the sophistication required of personnel, the cost of staff resources, the suitability for meaningful research, and the likelihood of replication.

Movement Within and Between Tiers. At present there is little agreement or data about what specific criteria or cut scores optimize decisions about movement through the tiers. Similarly, the mandate that scientific, researched-based instruction be used limits the choices for beginning reading instruction and raises difficult questions about instructional options in such areas as mathematics, reading comprehension, and written expression, in which few scientific, research-based interventions exist at the elementary or secondary level.

Intervention Fidelity and Other Instructional Issues. Major challenges to implementation of an RTI model are decisions about selecting and monitoring research-based interventions that are matched to students and implemented with fidelity and appropriate intensity, frequency, and duration. Other instructional issues that must be resolved include the environments in which various interventions will be provided and who will provide the interventions. Also to be resolved are the scheduling and the time needed for the team decision-making process, programs, interventions, and supports.

What Approaches are Available for Implementing RTI?

Several organizational approaches are available for implementing RTI. These models generally encompass the following four system requirements (Gresham, 2002 Vaughn, 2002):

- Measurement of academic growth
- Use of validated interventions
- Capability of distinguishing between:
 - a. Performance deficits and skill deficits and
 - b. Instructional problems and individual learning problems
- Ability to determine the effects of interventions and make decisions about cutoff criteria

These requirements imply both technical and practical capacity that must be considered when an RTI system is developed or adopted.

How Do You Measure Academic Growth?

Fuchs and Fuchs (1998) introduced the important concept that a student, in order to be considered to have a learning disability, must be dually discrepant. It has been demonstrated that, in order for a student to be reliably classified as having LD, low achievement must be accompanied by slow progress. Using low achievement alone results in group membership that will change substantially over time, with students moving into and out of the group. (Francis et al., 2005).

RTI decisions must be made both on the basis of a student's relative low achievement and on the student's slow slope of progress. This criterion can be met by use of a well documented approach referred to as curriculum based measurement (Fuchs and Fuchs, 1998). Curriculum based

measurement uses “critical indicators” of growth such as oral reading fluency, correct word sequences written, and rate of correct calculations. These measures may be normed on a local sample (Shin, 1988) or on the results of large scale studies.

Alternatively, typical peers may be sampled as a direct comparison group during the assessment phase (Fuchs and Fuchs, 1998). CBMs have been established as valid, easy to use, and economical. They can also be used as frequently as daily without threatening their sensitivity.

It should be noted that RTI research and model implementation generally focuses on elementary aged children. The measures that are available are most appropriately used with younger students and, as students mature, factors such as motivation and behavior make interpretation of students’ performance increasingly complex. This is true of traditional testing paradigms as well. RTI models frequently combine response to intervention with hypothesis testing or problem solving approaches, both of which become increasingly important for older students. For students in late elementary and secondary schools, careful review of students’ histories is very important.

How Do You Use Validated Interventions?

General education is the first intervention. Many authors (Kame’enui and Simmons, 2002) conceptualize the first phase of “intervention” to be at the general education basic or core curriculum level. From this perspective, use of a research based core curriculum is a necessary precondition for adopting RTI.

Such curricula provide development in the instructional components identified as essential by the National Reading Panel: phonemic awareness, systematic phonics, fluency, vocabulary, and text comprehension. A number of published curricula have been aligned with these instructional components. An issue for consideration in an RTI model is that there should be a mechanism in place for judging the fidelity of implementation of any identified curriculum.

Interventions are supported by research. With respect to more intensive individual interventions, the body of literature on validated procedures is growing. Gresham (2002) reviewed the current body of literature and reached the following conclusions:

1. The concept of a validated intervention protocol is supported by research.
2. A combination of “Direct Instruction” and “Strategy Instruction” is the most productive in effecting growth.

The use of validated instructional protocols presumes that the school has identified sets of instructional interventions, usually of increasing intensity, that have been demonstrated to be effective. These interventions are varied by curriculum focus, group size, frequency, duration, and motivational conditions.

Often, these variables are modified in relation to student characteristics. Using Direct Instruction and Strategy Instruction means the school has adopted interventions that are based on these well established instructional approaches.

Direct instruction models are characterized by relatively more teacher directed instruction and less independent seatwork. Information is carefully structured and sequenced and is actively presented so as to maximize student attention, involvement, and practice. Consistent procedures for cueing, prompting, and correction are utilized within the context of on-going assessment of

student understanding (Huitt, 1996). In direct instruction models, student mastery is carefully defined and achieved before moving to the next step in the instructional sequence.

Strategy instruction employs specific, highly elaborated instruction in text comprehension. Validated models of strategy instruction use instructional techniques that are consistent with direct instruction. Modeling and planned generalization of skills are typical instructional steps in strategy instruction. Several authors (Pressley, 2000) have described instructional sequences appropriate to strategy instruction.

How Do You Distinguish Between Types of Learning and Performance Problems?

Gresham (2002) describes relevant research demonstrating it is possible to determine if a student's problems are performance problems (can do, but doesn't) and instructional problems (wasn't taught or wasn't available for teaching). In the case of performance problems, an intervention might alter the motivational conditions (contingencies associated with) of a task. Howell and Nolet (2000) detail a number of ways to alter instructional conditions to assess the effects of motivation and other variables on acquisition of knowledge. In the case of instructional problems, the larger instructional context might be analyzed more thoroughly—for example, assessing the growth trends of all children in a class or grade level—to determine if there is a curriculum and instruction problem contributing to skill acquisition for the group as a whole.

These distinctions are often made within the context of what is termed a “problem solving” approach. In this approach, hypotheses are developed that “compete” with the explanation that a child has a disability. These hypotheses are tested by first providing interventions that address the problem identified and then evaluating the student's progress. For example, changing schools frequently is often a contributor to students' struggles. In a problem solving approach, the student might be provided with a moderately intense reading program at an appropriate curricular level. By tracking the student's progress carefully, the team might conclude that the student's strong response is an indicator that interrupted instruction, rather than the existence of a learning disability, is a reasonable explanation for the student's academic struggles.

How Do You Determine the Effects of Instruction and Make Decisions about Cutoff Criteria?

When beginning to use RTI, the first question practitioners often ask is: “How much progress is enough?” The second question, closely following, is “When is an intervention special education?”

Success in answering the first question is predicated on the ability to sensitively measure growth and to know what benchmark the student is working toward. Research in applied behavior analysis and curriculum based measurement inform the practices necessary to track the effects of interventions. A regular, reliable progress monitoring tool, such as an oral reading fluency measure, must be adopted. The school must also know what is expected of the typically progressing student. Data must be plotted and reviewed, and decisions must be made when the data are examined. Most systems develop decision making rules to guide this process. For example, a decision making rule might be “Change the intervention after one week of data points that do not meet the student's aim line.”

The second question, “When is an intervention special education?” is one that involves a system level decision as well as a clinical decision. First, a socially determined cut off for “functional” performance must be established. This is usually defined as being in the “average” range on a normal distribution. Secondly, an informed group of professionals needs to evaluate the intensity of the intervention provided and either test or make a professional judgment about the effect of removing an intensive intervention.

What Are the Different Types Response to Intervention Models?

A number of models have been utilized to implement RTI. Various authors have labeled their approaches as being of a specific type—such as those described below—but in reality the approaches share similarities. For example, the “problem solving” model is used at certain points in the “tiered model.” Both the problem solving and the tiered models may involve direct teacher referral to teams that may result in a form of what has been thought of as pre referral intervention.

What is Problem Solving or Hypothesis Testing?

Problem solving approaches typically involve a team of teachers who engage in a systematic process of problem identification and intervention implementation.

The underlying assumption in problem solving is that the presence of a disability is the least likely and therefore least common explanation for failure.

In problem solving approaches, teams of teachers and other specialists will typically review a student’s history and known attributes in an attempt to identify issues other than disability that would explain the student’s failure. Problems a teacher or team investigates could include interrupted school experiences caused by frequent moving or illness, lack of student “availability” for instruction due to trauma or behavioral challenges, inadequate previous instruction, or the presence of other disabilities.

Marston (2002) describes the widespread use of the problem solving approach in the Minneapolis Public School system. This system uses problem solving within the context of “Intervention Assistance Teams.” In Minneapolis, general education teachers are trained to identify problems, design interventions, and determine whether their interventions are effective. If they are not, the Intervention Assessment Team assists in developing and providing other interventions. If those interventions fail, the student is referred to a “Student Support Team” for a special education evaluation. This system relies heavily on the capacity of its general and special education teachers to use curriculum based measures (CBM) to track student progress and has well defined procedures for moving students through levels of intervention.

In order for a problem solving approach to meet the general IDEA 2004 evaluation requirements, meet RTI requirements, and overcome shortcomings associated with more traditional assessment models, schools must adopt the following system components:

1. Use of decision rules to prompt referral
2. Adopted standards for intervention design
3. Uniform progress monitoring procedures
4. Decision rules for judging effectiveness of interventions

The relative strengths and challenges inherent in a “pure” problem solving approach are summarized below:

Strengths

- Problem solving approaches address the “exclusionary” requirements of LD evaluation.
- A problem solving approach fits easily into systems that many schools already have in place, such as teacher assistance teams.
- Problem solving approaches may not require the adoption of extensive new assessment technology.
- Educationally relevant information may be gathered throughout the process.

Challenges

- Identified problems are often ones that cannot be directly addressed by schools.
 - Academic problems induced by external factors such as lack of preschool experience or behavior difficulties may coexist with learning disabilities.
- Problem solving models alone do not address problems like referral bias.

What are Pre Referral Approaches?

Pre referral models were conceived in the 1980’s as a method of addressing over-identification in special education through prevention of inappropriate referrals. Essentially, this model systematizes requirements that general education teachers modify instructional and classroom management approaches in order to better meet the needs of diverse learners. The assumption is that instructional or curricular needs rather than an intrinsic disability. Through pre referral, teachers are guided to differentiate instruction in order to maximize the number of students who benefit from the general education program.

The most typical pre referral models have at their heart a teacher assistance team, known by a variety of names including care teams, student study teams, and student assistance teams. The team processes cases of students who are identified by their teachers as struggling. The team may design specific interventions or make suggestions to the teacher for possible interventions. If positive results are documented, no referral is made to special education. If, however, a lack of improvement is noted, the student is referred for a special education evaluation.

Major shortcomings of the pre referral model for use in RTI include referral bias and negative perceptions of the process among classroom teachers. Factors such as teachers’ years of training and experience and the socioeconomic status of students have been shown to influence which students are identified as struggling (Drame, 2002). Referrals may be based as much on how overwhelmed teachers are feeling at any given moment as on a student’s level of skill development or performance. Additionally, the pre referral process can be viewed as a series of hoops through which a teacher must jump before being “allowed” to make a special education referral rather than as a meaningful avenue for addressing students’ needs (Slonski-Fowler & Truscott, 2004).

Perhaps the most significant drawback of a pre referral model is that the teacher must deal with each struggling student individually. Given that up to 20% of students are likely to have significant difficulty learning to read (Shaywitz, 2004), this approach makes it difficult to provide meaningful resources to all students.

While it is likely that students with the most apparent and immediate needs will be referred for interventions, intervening with students one by one forces teachers into educational triage. Meanwhile, students with marginal problems will continue to struggle and perhaps fall further behind (Gerber & Semmel, 1984; Gresham, MacMillan & Bocian, 1997).

Pre referral models may be more or less prescriptive with respect to decision rules for identifying students, intervention design, and progress monitoring. Many of the model's weaknesses can be addressed by adopting standard practices that are designed and monitored by the teacher assistance team.

Adopting procedures to ensure uniformity in decision making is critical to utilization of a pre referral model for RTI. Without specific system components, a pre referral system will not meet the general IDEA 2004 evaluation requirements or the RTI requirements, and will fail to remedy the shortcomings of traditional assessment paradigms.

Pre referral strengths and challenges include:

Strengths

- Many school districts currently have pre referral systems in place.
- Pre referral utilizes a team approach to identifying students.
- Pre referral provides for systematic response to students' difficulties before evaluation.
- Pre referral has the potential to build capacity for individual teachers to differentiate instruction for struggling learners.
- It may be combined with typical components of other models, such as problem solving approaches.
- Educationally relevant information is gathered throughout the process.

Challenges

- Pre referral does not inherently address the problem of referral bias, as it depends on idiosyncratic responses of teachers to academic difficulty.
- Traditionally, pre referral models do not use a prescribed intervention protocol.
- The reporting of effects of intervention is often anecdotal and lacks standard format for data presentation.
- Students are dealt with "one at a time," which may delay intervention to students with less severe deficits.

What is Tiered Intervention?

The three-tiered model is based on literature in the area of public health (Caplan & Grunebaum, 1967) and Positive Behavior Support (Walker et al., 1996). Using the public health analogy, systematic practices for healthy individuals (strong and normally developing readers) and those at risk of developing health conditions (students showing early signs of struggling) will prevent severe problems from developing and will also allow for identification of individuals with the potential to develop severe problems.

The underlying assumption of this prevention oriented approach is that approximately 80% of students will benefit from implementation of a research based core curriculum program that is being delivered with a high degree of fidelity. This level of "intervention" is referred to as "primary" or "Tier I." An estimated 15% of students will need additional intervention support

beyond the core curriculum (“secondary” or “Tier II”) , and about 5% who have not responded to primary and secondary efforts may require more intensive individualized support (“Tertiary” or “Tier III” level).

This approach requires the use of a universal screening program. The three-tiered model has been implemented successfully in Oregon as the Effective Behavior and Instructional Support system (Sadler, 2002). In this model, teams of teachers examine a standard set of data that is gathered on a periodic schedule. Students are sorted into groups that are provided with increasingly intensive interventions depending on their achievement and response to intervention. Movement through the tiers is a dynamic process, with students entering and exiting according to their progress data.

In this model, it is assumed that students who do not respond to the most intensive intervention are likely to have a learning disability. Frequently, the tiered approach is combined with more traditional assessment models or with problem solving procedures before a student is determined to have a disability.

This approach requires “blurring” of the lines between general and special education, as well as close cooperation or merging of compensatory education services and services for English language learners.

Relative strengths and challenges of the tiered model include:

Strengths

- All struggling students are identified. Prevention and early identification are possible.
- Students may be “sorted” into levels of severity and interventions may be tailored to each group.
- Decision making is based on standardized progress monitoring information.
- Intervention decisions can be standardized.
- It may be combined with typical components of other models, such as problem solving approaches.
- Educationally relevant information is gathered throughout the process.

Challenges

- Resources must be committed for universal screening.
- It requires skill grouping across classes to provide interventions of sufficient intensity.
- Ensuring that every child at risk is identified and provided intervention requires establishment of broad groupings, which may result in allocation of resources on children who are not actually in need.
- The most suitable screening and progress monitoring tools are available in reading. Tools in other areas are not as well established.

What Resources Are Necessary to Implement an RTI Approach?

To implement an RTI approach, many questions about ensuring adequate resources must first be resolved. Some of the challenges that must be addressed are as follows.

Time. Implementation of an RTI approach can be expected to create a need for decisions about adjustments in daily student, teacher, and administrative schedules and time for decision-making team meetings to be incorporated into school, personnel, and parent schedules. Time for professional development will need to be allotted both prior to adopting a new approach and on an ongoing basis. Other critical decisions concern timelines for the phasing in of an RTI approach, the establishment of timelines for the minimum and maximum time a student may spend in various tiers, and how much time will be given to specific instruction or intervention efforts.

Space and Materials. An important part of successful implementation of an RTI approach is provision of needed space and materials. These will include space for conducting intensive small group or tutoring interventions, as well as the materials and technology required for professional development, evidence-based and intensive instruction, progress monitoring, evaluation, and record keeping.

Documentation. For school personnel there will be increased paperwork due to data collection and documentation demands for the progress monitoring, classification criteria, movement between levels, intervention documentation, and other record keeping that are critical for following the progress of individual students in an RTI approach. The President's Commission on Excellence in Special Education (2002) identified the amount of paperwork as the main cause of dissatisfaction among special education teachers. How much this would be ameliorated by the availability and use of computers and other technological devices and assistance from paraprofessionals, however, remains an unresolved question.

Financial Support. Although several RTI models have been implemented in various parts of the United States, there is very little information available about the comparative costs of RTI with more traditional service delivery models. However, the changing personnel needs, increased resource requirements, and added professional development activities typical of initial implementation of an RTI model all suggest there will be increased costs, at least in the short term. Designated instructional services, such as speech and language, occupational therapy, educational therapy, and psychological services will also need continued funding.

It has been proposed that special education funds be used by general education to cover the cost of intensified instruction for students who are falling behind. If the number of students in special education were not to decrease, resources for students who are in need of special education and related services would have to be curtailed unless additional funds are allocated.