

RTI

*A Practitioner's Guide to Implementing
Response to Intervention*

**Daryl F. Mellard
Evelyn Johnson**

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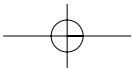
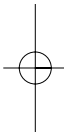
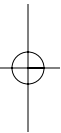
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Preface

Response to intervention (RTI) is gaining momentum as a school-wide framework for improving students' outcomes; an increasing number of resources describe RTI. The purpose of this text is to provide practical guidance on implementing an RTI framework within a school. Developing and implementing RTI is not a one-shot, quick-fix activity. It involves important social, technical, and practical considerations. As state education agencies, school districts, and school staffs develop and implement RTI, this text will provide a framework for understanding the components, procedures, practices, and criteria that are reflected in research. We believe that the most significant issues that implementers confront are not technical but social. Successful implementation requires ensuring a fit with the personal views, interaction patterns, and contextual features of a school's climate. The text's guidance will help with those decisions that support RTI within the varied contexts of states' and schools' policies and practices.

Clarifying our perspective in writing this text is important. As described in Chapter 1, RTI can serve three distinct applications: screening and prevention, early intervention, and disability determination. Within this text, we emphasize RTI in a general education setting for prevention and early intervention of students' learning difficulties. Strong evidence supports the RTI components and principles to improve instruction and related student outcomes. The research does not, to date, support the use of RTI as an exclusive component to disability determination. However, the research foundation may be used in incorporating RTI as *one* component of disability determination. As such, RTI provides documentation that the student has received appropriate and high-quality instruction in the general classroom, but more thorough assessment is required to determine the nature and extent of the student's disability if a special education referral is made.

The suggestions and guidance presented are drawn extensively from the National Research Center on Learning Disabilities (NRCLD) research. Like many areas of education, research and understanding of areas related to RTI continue to expand at incredible rates. In recognition of this expanding knowledge, rather than recommending specific curricula or assessment tools, or both, that may quickly become outdated or limited in scope, we have attempted to capture the salient features, characteristics, and principles on which research-based RTI models are based. Understanding these principles may help a school make decisions as new curricula, screening measures, progress monitoring systems, and intervention tools are developed. We intend for schools to find the information useful as they begin their RTI model development and implementation.

The information is organized into nine chapters. Chapters 1 and 2 provide an overview of the RTI framework, as well as the policies and legislation that support its implementation. Chapters 3 through 8 are devoted to explaining the particular components of a three-tiered RTI model: Schoolwide Screening, Progress Monitoring, Tier 1: General Education, Tier 2: Intervention, Tier 3: Special Education, and Fidelity of Implementation. Within each of these chapters, you will find definitions, features, implementation guidance, case studies, and resources to facilitate your understanding and planning. Finally, Chapter 9 summarizes what is currently known about RTI and offers concluding thoughts on implementation.

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This work would not have been possible without significant contributions from many professionals in the field, including our colleagues at the NRCLD: Don Deshler, Doug Fuchs, Lynn Fuchs, Don Compton, Dan Reschly, Barbara Starrett, Melinda McKnight, Julie Tollefson, Sonja de Boer, and Sara Byrd; Lou Danielson and Renee Bradley from the Office of Special Education Programs (OSEP); the school staffs from Jefferson Elementary School in Pella, Iowa, Tualatin Elementary in Tualatin, Oregon, Rosewood Elementary School in Vero Beach, Florida, and Northstar Elementary School in Knoxville, Iowa. Finally, we acknowledge the editorial work of Kirsten McBride, whose talents in translating jargon, obfuscations, and other confusions into meaningfully connected prose are incredible and are greatly appreciated.

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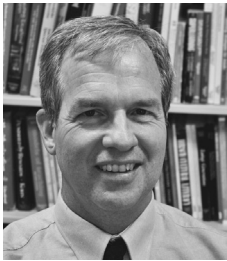
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He has been the principal investigator of research and evaluation studies. Dr. Mellard's current projects address assessment and services to children and youth with learning disabilities, reading comprehension, and adult literacy. Dr. Mellard is one of the principal investigators with the National Research Center on Learning Disabilities (NRCLD) (nrclد.org) that examined the identification of learning disabilities, including the application of responsiveness to intervention. Dr. Mellard directed the NRCLD staff in their review of RTI as implemented in numerous elementary school settings. Dr. Mellard also directed research on social, education, and employment issues for adults with disabilities. These projects involved consumers, employers, and staff in community and technical colleges, independent living centers, vocational rehabilitation, One-Stop Career Centers, and adult education and literacy programs.

Additionally, as a service to the state of Kansas, Dr. Mellard served as a co-chair to the Kansas Coalition on Adult Literacy and Learning Disabilities. This work group was formed to coordinate the efforts of education, corrections, rehabilitation, human resources, and businesses in meeting the needs and legal requirements of individuals

with disabilities. Contributing to his views on adults with disabilities and their services, for the past six years Dr. Mellard has served as an officer on a board of directors' for the local independent living center.



Evelyn Johnson, EdD (Boise State University), was a research associate for the National Research Center on Learning Disabilities (NRCLD) (nrclد.org) until August 2007, at which time she began work as an Assistant Professor of Special Education at Boise State University in Boise, Idaho. She began her career in Washington in 1994 as a special education teacher, and then at the University of Washington, Seattle, where her research focused on the inclusion of students with disabilities in accountability systems. Dr. Johnson's work on assessment for students with disabilities has included research on accommodations and alternative assessments, as well as investigations on literacy assessment. She worked for the NRCLD from 2003 to 2007, during which time she developed numerous technical assistance products to assist state and local educational agencies on RTI and learning disability identification-related issues.

1

Introduction

What Is RTI?

Response to intervention (RTI) is a promising new process of instruction, assessment, and intervention that allows schools to identify struggling students early, provide appropriate instructional interventions, and increase the likelihood that the students can be successful and maintain their class placement. RTI, when implemented according to best practices, addresses many shortcomings of current systems of identifying students that are at risk for learning disabilities (LDs) and providing appropriate interventions. Traditionally, schools have had two parallel systems for students: general and special education. A student who was perceived to be unsuccessful in the general classroom was referred for evaluation for special education services, and, if found eligible, was frequently served under the category of learning disabled. Special education was typically a separate system of instruction, with little alignment to the general curriculum. Additionally, evaluation procedures for students with LDs resulted in a “wait to fail” model, because of the need to demonstrate a discrepancy between aptitude and achievement. RTI addresses many of these shortcomings. Through its focus on alignment of general classroom instruction, progress monitoring, and evidence-based interventions, RTI can help schools work more efficiently and effectively in addressing the needs of all learners.

RTI provides a process through which the achievement of all students can be enhanced. The RTI framework is also consistent with current federal and state policies that focus on improving outcomes for all students and on increasing access to the general curriculum. For example, RTI can be used to meet the requirements outlined in the Individuals with Disabilities Education Act (IDEA, 2004) for determination of specific learning disabilities (SLDs). The closer alignment of interventions with general classroom instruction in the RTI process also provides a mechanism through which schools ensure access to the general curriculum for all students. Additionally, the focus in RTI on progress monitoring, early intervention, and evidence-based practices is consistent with many of the requirements of the No Child Left Behind Act (NCLB, 2001) and Reading First policies. Most important, when implemented with fidelity, RTI procedures can identify and intervene for struggling students early in the educational process, thereby reducing academic failure. For example, numerous screening measures for reading failure can be used with kindergarteners and first graders and can accurately identify those students who are most at risk for reading failure. For these students, instructional and curricular changes can be made to increase their likelihood of success (Catts, 2006; Compton, 2006).

Our goal in this text is to provide a guide to school-level implementation of RTI that is based on a review of school- and research-based RTI practices and procedures (see, for example, Bradley, Danielson, & Hallahan, 2002; NRCLD, 2003; Vaughn & Fuchs, 2003). It is our hope that the text is a useful tool for school-level leaders as they begin the process of implementation. To accomplish this, we've organized this text in three main sections: (a) an overview to describe the concept of RTI and its relation to existing policy initiatives (Chapters 1 and 2); (b) a detailed guide to implementation based on research-based components of an RTI model, including descriptions of actual implementation sites (Chapters 3 through 8); and (c) a summary of the research and continuing questions on RTI (Chapter 9). Finally, the text includes numerous resources for pursuing further information. Overall, we believe you will find this text helpful as you consider RTI implementation. The practical descriptions and multiple examples will increase the ease with which you will be able to thoughtfully, accurately, and effectively implement RTI within your school.

The remainder of this chapter includes a general description of how services are organized into tiers of increasing intensity within RTI, commonly recognized RTI components, the purposes of RTI, and research support for RTI.

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RTI as a Three-Tiered Model

RTI is most often conceptualized as a multitiered model. This framework is based on a public health model of intervention whereby multiple tiers of increasingly intense interventions are directed at correspondingly smaller and smaller population segments. For example, in public health, the general population gets wellness information on how to stay healthy and receives basic, broad vaccinations. This represents the first, or primary, tier of intervention. Despite the efforts during the first tier, 10%–15% of the population may require treatment that is more specialized to stay healthy. This level of specialized treatment is considered the secondary level of intervention. Even within this second-tier group, about 5% will need very specialized interventions. This highest level is referred to as the tertiary level of intervention and is the most resource-intensive level.

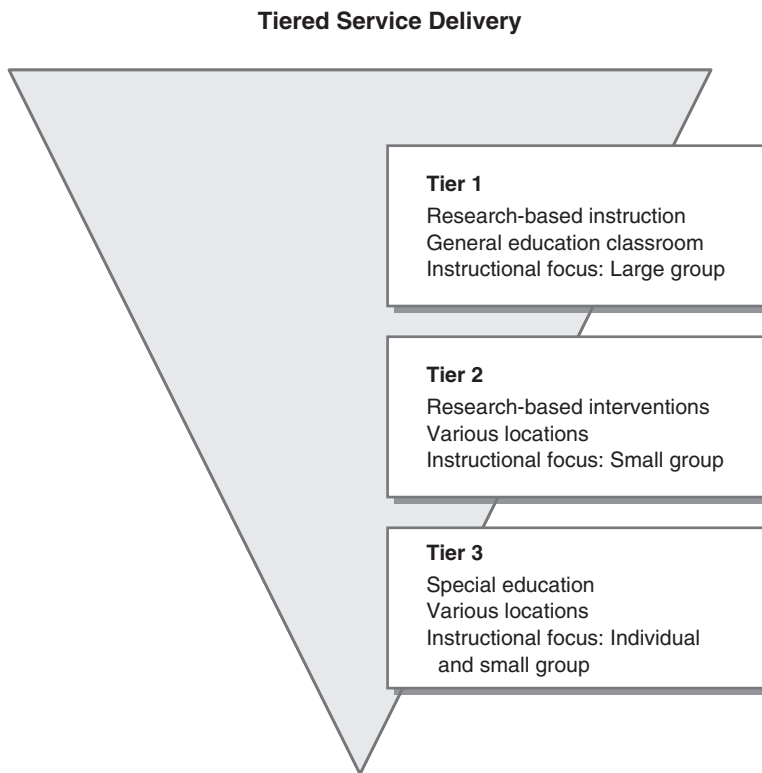
When applied to students' academic performances, the three tiers are distinguished by their intervention focus. In Tier 1, all students receive high-quality, developmentally appropriate instruction within the general education classroom. Within this level, the environment is the most important component. Changes made in the instructional environment are considered to be most valuable for improving the overall student performance; since these changes can be anticipated on the basis of previous experience and research findings, much effort is directed at improving the general education environment. General education staff conduct screenings to identify students at risk for academic failure and to ensure that all students are benefiting from instruction. Students whose screening results indicate that they are not making adequate progress receive appropriate interventions in Tier 2. Tier 2 interventions typically involve small-group instruction on the targeted area of deficit. For example, students who have difficulty decoding words will receive intense, small-group instruction that is

focused on this skill. The frequency (number of minutes a day, number of days a week) and duration (how many weeks) of the intervention are usually specified as conditions for the Tier 2 intervention. The student's response to this intervention is monitored; based on this response, one of three decisions is made: (1) If the student is at a level of performance that matches that of his grade-level peers, he returns to Tier 1. (2) If the student's performance is still below that of his grade-level peers, but he is making adequate progress toward the stated goals, the student may remain in a Tier 2 intervention. Finally, (3) if the student does not respond to the intervention provided, he moves to Tier 3, where interventions that are more intensive can be provided to meet individual needs.

Two features distinguish Tier 3 interventions: First, they are no longer considered interventions to prevent, but rather as interventions to address an identified need. Second, they are generally individual focused, and not group focused as in Tiers 1 and 2. Interventions at Tier 3 are considered the most powerful available, which is often reflected in the severity of the disability of the individuals receiving the intervention, the quality of the instructor, and the interventions' demonstrated effectiveness. The instructional intensity, curriculum, instructional goals, and instructional setting may all be manipulated to increase the likelihood of the student responding successfully. Figure 1.1 depicts a three-tiered RTI model.

RTI reflects an integration of several concepts important to improving learners' outcomes and to improving the accuracy of the diagnosis of LDs. RTI combines important features of assessment and instruction to address the limitations associated with current intervention and assessment models. Among the commonly cited limitations with current approaches to LD determination is that assessments may not accurately reflect the curricular tasks students confront in their classroom and that they provide a very narrow view of students' knowledge, skills, and abilities. In contrast, RTI has highly contextualized assessment such as judging student performance in light of the curricular demands within a school or district and focusing assessment tasks on those tasks that very closely match those that a student is confronting in the classroom. These features help increase the ecological validity of the assessment. The following are core requirements of a strong RTI model:

1. *High-Quality, Research-Based Classroom Instruction.* All students receive high-quality instruction in the general education setting. General education instruction is research based; general

Figure 1.1 Three-Tiered RTI Model

education teachers assume an active role in students' assessment in the classroom curriculum.

2. *Universal Screening.* School staff, including the classroom teachers, conduct universal screening of academics and behavior. Specific criteria for judging the achievement of all students are applied in determining which students need closer monitoring or intervention.
3. *Progress Monitoring at All Tiers.* Progress monitoring is essential. In Tier 1, progress monitoring allows teachers to readily identify those learners who are not meeting expected standards. In Tiers 2 and 3, progress monitoring enables teachers to determine the interventions' effectiveness and to make changes as needed.
4. *Research-Based Interventions at Tiers 2 and 3.* When a student's screening or progress monitoring results indicate a deficit, an

appropriate instructional intervention is implemented. School staff implement specific, research-based interventions to address the student's difficulties.

5. *Fidelity Measures.* The fidelity with which instruction and interventions are implemented is systematically assessed and linked to continuing professional development to increase the effectiveness of the RTI process.

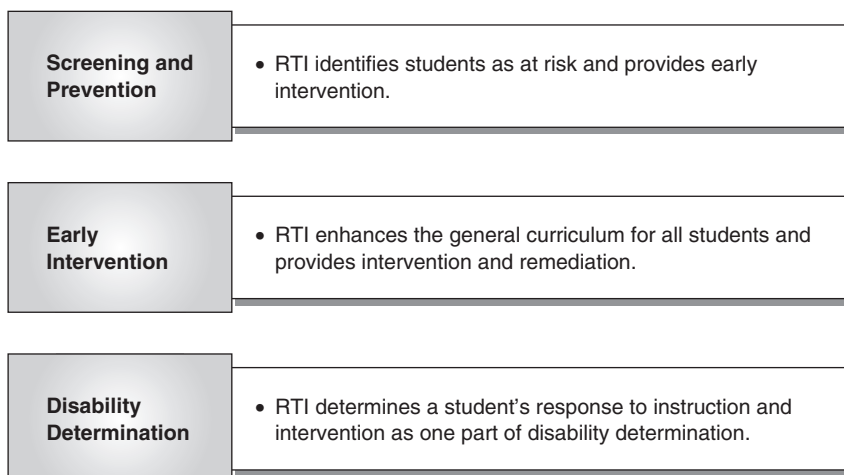
Purposes of RTI

Together, these components offer a schoolwide model of integrated instruction, assessment, and data-based decision making. The RTI model can serve three distinct functions within a school setting: screening and prevention, early intervention, and disability determination. The various applications of RTI are depicted in Figure 1.2.

Screening and Prevention

The focus on ensuring high-quality, evidenced-based instruction in the general education setting is the first line of defense in preventing later learning difficulties. When universal screening procedures identify students as being at risk, they may be targeted for further monitoring or for early intervention.

Figure 1.2 Applications of RTI



Early Intervention

Early intervention can occur at any grade level and is applied to students whose progress is not commensurate with that of their peers. The intent is to close the achievement and learning gaps and to intervene with an effective curricular and instructional change.

Disability Determination

RTI can serve as one important component of disability determination. The focus on evidenced-based instruction in general education, combined with research-based interventions in Tier 2, meets an important requirement of disability eligibility determination: that low achievement is not due to a lack of appropriate instructional experiences as described in IDEA 2004, 614 (b) (5). Thus, a student who fails to respond to research-based instruction and interventions should be further assessed to determine the presence of a disability. The data collected through progress monitoring on the student's performance, along with fidelity data to verify the instruction and interventions were appropriately implemented, serve as important evidence in the overall eligibility decision-making process.

Research Support for RTI

Research on an RTI framework has demonstrated the need and value for early identification of students with learning difficulties and for intense interventions delivered with fidelity. One of the most significant findings in the research on RTI is that the components and procedures used within this framework lend themselves to a better understanding of instructional quality and informed decision making (see, for example, Foorman, Francis, Fletcher, Schatschneider & Mehta, 1998; O'Connor & Jenkins, 1999; Torgesen, Alexander, Wagner, Rashotte, Voeller, & Conway, 2001). Instructional quality includes planning interventions, assessing intervention outcomes, and manipulating variables that are likely to improve outcomes. This feature has positive implications for teachers (both general and special education), parents, and staff. In addition, RTI can yield information that accurately ranks a student within his peer group and his performance in the school's curriculum (Speece & Case, 2001). As a result, students at risk for learning difficulties can be identified and receive appropriate interventions (Vaughn & Fuchs, 2003; Vaughn, Linan-Thompson, & Hickman, 2003).

For use within disability determination, some advocates of an RTI approach identify the following advantages of RTI:

- A reduced reliance on teachers to initiate referrals
- A focus on academic skills, not presumed processing deficits
- A focus on students' learning, not just current achievement
- The elimination of the need for aptitude-achievement discrepancy and intelligence testing
- A reduction in false positive identification errors (O'Connor, Harty, & Fulmer, 2005; Speece, Case & Molloy, 2003)

RTI is a multitiered framework for preventing reading problems and for intervening in the cases of students who are not successful in the general education curriculum. Numerous studies have demonstrated the effectiveness of RTI for preventing reading problems (summarized in Mellard, Byrd, Johnson, Tollefson, & Boesche, 2004). Controlled studies examining how RTI might be implemented by schools and districts within the process of disability determination demonstrate that RTI should be pursued as a viable option for identifying students with LDs (Speece et al., 2003; Vaughn et al., 2003). At this time, information from research-based interventions is primarily focused on early reading. Research examining the use of RTI in the areas of later reading, math, writing, and content areas is under way and will provide important information on how the RTI framework might be applied across content areas and grade levels.

Summary

RTI is an important construct because of its potential to help schools provide appropriate learning experiences for all students, and its use in the early identification of students at risk for academic failure. RTI is a multitiered service delivery intervention similar to those used for other schoolwide practices, such as positive behavioral support. RTI combines important features of assessment and instruction and consists of the following components:

1. High-quality, evidence-based instructional practices
2. Universal screening
3. Continuous progress monitoring of students in all tiers

4. Research-based interventions implemented with students identified as at risk
5. Fidelity of implementation

The research support for an RTI model demonstrates that it can lead to better instructional programming and decision making. Although current research focuses primarily on reading, RTI—as a framework—may be applied to other academic areas as the research base in these areas expands.

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RTI in the Context of Policy Initiatives

RTI represents one of the many policy initiatives that compete for a school's resources, attention, understanding, and implementation. For example, the No Child Left Behind Act (NCLB, 2001) and Individuals with Disabilities Education Act (IDEA, 2004) include an emphasis on accountability and the use of scientifically based curricula. In addition to these federal initiatives, state and local policies related to assessment and instruction affect school functioning. Ultimately, most policy initiatives have a shared goal—improved learning for all students—although they often focus on a narrow aspect of the curriculum, school functioning, or school population. Schools are left to organize and integrate these policies in ways that complement the school's stated mission to reach what has been called coherence (Honig & Hatch, 2004; Newmann, Smith, Allensworth, & Bryk, 2001). Coherence provides an organizing framework for schools to manage the competing demands of policy initiatives while remaining faithful to their stated mission.

Due to the numerous initiatives vying for attention, however, policy incoherence is too often the norm for many schools as they attempt to comply with competing demands. Incoherence occurs when a particular policy is interpreted on its own, as if its practices

are unrelated to others (Spillane, Reiser & Reimer, 2002). The result is a fragmented, haphazard approach to ensuring a quality education for students.

In Chapter 1, we described the RTI framework, gave a description of its essential components, and discussed three uses for improving student outcomes. In this chapter, using policy coherence as a framework, we examine RTI within the context of three federal initiatives: NCLB 2001, Reading First, and IDEA 2004. We conclude the chapter with a table that juxtaposes these initiatives to highlight how they might be used efficiently and effectively to guide school improvement efforts.

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Policy Coherence, Professional Learning Communities, and the Professional Teaching and Learning Cycle

At any given time, school leaders face the challenge of complying with numerous initiatives at the federal, state, and local levels. Examples include NCLB 2001, which places significant demands on instruction, assessment, and staffing requirements; IDEA 2004, which governs special education; changes to state curricula and assessment processes, which have resulted in significant changes to instruction; and changes in governance, such as school-based decision making. Although most policy initiatives are designed to address a significant problem such as increasing the number of highly qualified teachers, many are developed in isolation and narrowly defined, addressing a specific population, a specific academic or behavioral issue, or some other school function. However, addressing problems through solutions that are not coordinated with other efforts rarely results in the sustained

improvements that schools hope to achieve (Herbert, Murphy, Ramos, Vaden-Kiernan, & Buttram, 2005). Many of these initiatives, especially at the federal level, offer inducements to schools whereby compliance with initiatives brings increased funding to support schools. Therefore, schools face a fundamental challenge of coordinating their efforts in a way that promotes increased student achievement and meets the demands of the policies that govern their school functioning.

Research on school improvement provides a helpful framework around which schools can organize their efforts in a way that leads to improved student achievement. This framework consists of three main components:

1. Deciding on the school's theory of purpose (described immediately below)
2. Creating coherence through the coordination of instructional efforts
3. Building the professional capacity of teachers and leaders (Herbert et al., 2005)

Theory of Purpose

Before any school improvement effort is undertaken, a school must decide what it stands for and what it hopes to achieve (Ashby, Maki, & Cunningham-Morris, 1996). Once articulated, this theory of purpose becomes the yardstick by which schools measure how well the policies they adopt contribute to and support their most important goals. Schools can then design appropriate courses of action that work toward supporting their goals. Many schools summarize their theory of purpose and frame it as a mission statement (Goodlad, Mantle-Bromley, & Goodlad, 2004). Thus, mission statements attempt to provide a concise vision of a school's purpose. A core feature of mission statements of successful school improvement sites is a focus on increased student learning and instructional improvement (Togneri & Anderson, 2003). To be meaningful, mission statements must guide all of the activities in which a school engages.

An RTI framework can be supportive of mission statements that focus on increased student learning and instructional improvement. RTI presents an integrated model of instruction, assessment, and intervention, as well as provides a schoolwide approach to reviewing and addressing academic achievement of all students.

Coherence

To be effective in increasing the goal of student achievement, a school must organize its functioning around this goal (Goodlad et al., 2004). Newmann et al. (2001) describe this organization as instructional program coherence (IPC), which is defined as “a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate, and are pursued over a sustained period” (p. 299). According to Newmann and colleagues, schools that have high levels of IPC tend to have higher student achievement.

Key characteristics of IPC include the following:

1. Curriculum, instruction, assessment, and learning climates are coordinated, both within grade levels (horizontally) and across grade levels (vertically).
2. Support programs are coordinated with the school's instructional framework to support the needs of students at risk or struggling learners.
3. School organization is designed to support the implementation of this framework.
4. Materials, programs, and other resources are designed, allocated, and implemented in a manner consistent with the instructional framework (Newmann et al., 2001).

The RTI framework can help schools achieve greater instructional program coherence. Specifically, the alignment of screening instruments related to key academic areas in concert with the implementation of targeted interventions to support achievement in the general instructional program are useful instruments through which IPC can be achieved.

Building Capacity

How schools act to create and sustain higher levels of teacher performance is integral to implementing evidenced-based practices reliably to scale (Gerber, 2005). Professional learning communities (PLCs; Astuto, Clark, Read, McGree, & Fernandez, 1993; DuFour & Eaker, 1998) provide a model that has been demonstrated as effective for building instructional capacity that improves student achievement (Hord, 1997). Within a PLC, teachers and leaders build their capacity to

- Create IPC
- Use data systematically to inform and improve instruction
- Engage in continued professional development
- Build collaborative relationships that promote and support student achievement (DuFour & Eaker, 1998)

At the classroom level, an effective model for building capacity is the professional teaching and learning cycle (PTLC) (Herbert et al., 2005). Within the PTLC, teachers do the following:

1. Study the standards and set expectations for student learning
2. Select instructional practices to meet the expectations
3. Plan instruction and related, common assessments
4. Implement instruction and assessment
5. Analyze student performance
6. Adjust instruction according to results

Both the PLC and PTLC models provide helpful contexts for considering an RTI model. At the school level, RTI under the umbrella of PLC holds the promise of marked improvements in student achievement, the rapid identification of unproductive teaching techniques, and the prospect of informing professional development needs. At the classroom level, RTI and the PTLC emphasize the critical importance of monitoring, data-based decision making, and reflective practice.

Key Elements of NCLB 2001

The No Child Left Behind Act (NCLB, 2001) is one of the most significant federal education policy initiatives facing schools today. NCLB 2001 legislated significant changes in standards for schools that focus on accountability for every student's progress, ensuring that students are taught by highly qualified teachers, proving that programs are successful based on scientifically based research, and creating a system fully aligned with state learning regulations. Our goal here is not to provide a comprehensive review or critical analysis of NCLB, but

rather to discuss specific components of the legislation that are relevant to RTI. Components of NCLB that are addressed through an RTI framework include

- Prevention of and intervention for academic problems
- Scientifically based research
- Accountability

Prevention and Intervention

NCLB 2001 is the reauthorization of the Elementary and Secondary Education Act (ESEA, 1965). ESEA was part of President Johnson's larger "war on poverty," which sought to improve educational opportunity for economically disadvantaged students. As part of the ESEA, Title I (Improving the Academic Achievement of the Disadvantaged) established a compensatory system of education devoted to improving the academic achievement of economically disadvantaged students. The purpose of Title I in NCLB was

providing children an enriched and accelerated educational program, including the use of schoolwide programs or additional services that increase the amount and quality of instructional time; promoting schoolwide reform and ensuring the access of children to effective, scientifically based instructional strategies and challenging academic content. (NCLB, 2001, Sec. 1001(8), (9), p. 16)

One key purpose of an RTI process is a focus on intervention for students at risk for academic failure. That is, through screening and routine progress monitoring, students experiencing academic difficulties may be identified early and provided with specific interventions that increase their learning.

Scientifically Based Practice

Reviews of NCLB 2001 legislation often report the numerous references to scientifically based research and evidence-based practices. *Scientifically based research*, as defined in NCLB, "means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs" (NCLB, 2001, (37)(A), p. 540).

Two key components of effective RTI models include the use of evidence-based practices at all tiers of intervention and the use of

progress monitoring, which has been demonstrated to result in improved academic outcomes (Stecker, Fuchs & Fuchs, 2005). Using an RTI framework across educational disciplines as well as grade levels is consistent with the focus on scientifically based research: it promotes the values that schools have an obligation to ensure that all students participate in strong instructional programs that support student achievement.

Accountability

Accountability is another large component of NCLB 2001, with its requirements that state education agencies submit reports detailing adequate yearly progress to the Department of Education. NCLB places particularly strong emphasis on reading and math by requiring states to assess students yearly from Grades 3 through 8 and once during high school. NCLB also requires states to assess their students in science at least once during each of three grade spans: Grades 3–5, 6–9, and 10–12.

An RTI framework, and specifically its focus on progress monitoring, provides a comprehensive approach to a school's ongoing efforts to help all students meet grade-level expectations. As states continue their assessment programs, they recognize the importance of monitoring student progress toward grade-level benchmarks prior to the yearly assessments. The alignment of progress monitoring measures with state assessments provides schools a way to target students who may be at risk for not achieving state-determined, grade-level standards. The progress monitoring component of RTI might also prove helpful in considering NCLB's safe harbor provision, which means that schools may meet adequate yearly progress if they can demonstrate that students are making progress toward proficiency (Nagle, Yunker, & Malmgren, 2006).

In summary, the intended goal of NCLB is to ensure high achievement for all students and to align curriculum, instruction, and assessment through its emphasis on scientifically based research and accountability. As noted, RTI has clear parallels to these goals with its own goals for high student achievement and the alignment of instruction, interventions, and assessment to promote student learning.

Key Elements of Reading First

Reading First is the part of NCLB that is dedicated to ensuring all children learn to read on grade level by the third grade. Reading First

provides funding to states and many school districts to support high-quality reading programs based on the best scientific research. Consistent with findings from the National Reading Panel (National Institute of Child Health and Human Development, 2000), Reading First identifies five essential components of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Reading First also emphasizes the need to select instructional and assessment tools and practices that have been determined to be effective with students at risk for early reading failure.

An important component of Reading First includes a provision to provide professional development for teachers of students in kindergarten through Grade 3 on effective reading instruction and assessment practices. In summary, building on the findings of the National Reading Panel, the program goals are to improve reading achievement by selecting, implementing, and providing professional development for teachers using scientifically based reading programs and by ensuring accountability through ongoing, valid, and reliable screening, diagnostic, and classroom-based assessment.

RTI presents an organizing framework through which schools can meet the requirements of Reading First and through which schools can promote higher student achievement in reading. Specifically, RTI incorporates screening and progress monitoring measures, early intervention for students learning to read, and evidence-based practices at all tiers of intervention.

Key Provisions of IDEA 2004

The Individuals with Disabilities Education Act (IDEA, 2004) is the federal legislation governing educational processes that serve people with disabilities from birth to age 21. The most recent changes in regulations emphasize the need to improve educational outcomes for students with disabilities by including them in accountability and assessment systems. Additionally, IDEA 2004 focuses on providing access to the general education curriculum for students with disabilities through the use of evidenced-based instructional practices. Other significant changes within the most recent IDEA regulations include the use of RTI as one way to identify specific learning disabilities and provide early intervening services for students who are determined to be at risk for learning problems.

A shift at the federal level toward achieving greater policy coherence is seen in the effort to align many of IDEA regulations with NCLB. Specifically, IDEA aligns with NCLB by ensuring that educational personnel are highly qualified, specifying that research-based interventions are used, enhancing student progress through the use of early intervening services, and preventing overidentification and disproportionate representation of minority students in special education. Similar to NCLB, IDEA also requires that states submit annual state performance plans to report progress and performance across indicators associated with specified monitoring priorities. More important, the state performance plan represents a useful tool for defining a problem, collecting and evaluating data, and making data-based decision plans for improvement at the state level.

Elements of IDEA that align with the RTI framework include scientifically based research, early intervening services, prevention of overidentification and disproportionate representation, and special requirements for determining and documenting the presence of a disability. At the student level, IDEA requires evidence that a student has had appropriate instructional opportunities in the general education classroom as part of a comprehensive evaluation for identification of learning disabilities. This evidence comes in the form of observation of the classroom environment and data collected on the student's progress within the general curriculum. Furthermore, students identified as having a disability and receiving services under IDEA must have an individualized education program (IEP) that includes present levels of performance in the relevant academic areas, annual goals, progress monitoring plans, and a description of the intervention and services needed. The IEP is agreed on by a collaborative team that uses existing information to guide its development.

In summary, IDEA focuses on improving educational outcomes for students with disabilities. Within IDEA, there is an increased emphasis on gaining access to the general curriculum through the use of scientifically based instruction and interventions, inclusion in assessment systems, and the use of routine progress monitoring. Specific regulations of IDEA 2004 allow for professional development for teachers to provide high-quality instructional and assessment practices that result in higher student achievement. Many of these changes in IDEA align with the RTI framework, including the focus on early intervention, data collection, and the use of evidence-based practices.

Table 2.1 Crosswalk of RTI, NCLB 2001, Reading First, and IDEA 2004

	<i>RTI</i>	<i>NCLB 2001</i>	<i>Reading First</i>	<i>IDEA 2004</i>
<i>Statement of Purpose</i>	Provides a schoolwide model of integrated instruction, assessment, and data-based decision making to improve student outcomes.	Requires that all students reach high standards in reading, writing, and math and graduate from high school.	Focuses on increased reading achievement for students in Grades K-3.	Improves educational outcomes for students with disabilities.
<i>Instructional Program Coherence</i>	Requires both horizontal and vertical alignment of instructional practices, screening, and monitoring.	Requires an integrated instruction and assessment system. Requires assessment of student progress in the state curriculum.	Requires the use of scientifically based instruction and assessment in the essential components of reading from Grades K-3, including supplemental support for students with reading difficulties.	Requires the use of research-based interventions, progress monitoring, accountability, and access to the general curriculum, as well as alignment of transition services with postschool opportunities.
<i>Building Capacity</i>	Focuses on schoolwide systems requires greater collaboration of teachers and staff to coordinate efforts of instructional delivery, assessment, and decision making.	Requires data collection and evaluation to determine adequate yearly progress. Requires that teachers be highly qualified.	Emphasizes capacity building through its focus on procuring instructional materials and providing professional development for K-3 teachers in the essential components of reading instruction.	Encourages capacity building through the inclusion of an early-intervening services provision that includes providing interventions to students at risk and related professional development for teachers.

Summary

Using the policy coherence framework as an organizing principle, Table 2.1 juxtaposes RTI, NCLB 2001, Reading First, and IDEA 2004.

As illustrated, these policy initiatives have much in common with the PLC and school improvement research. An RTI framework provides an increased level of precision to the process of increasing student achievement. Through its focus on increasing student achievement, aligning instruction and assessment practices, and data-based decision making at the schoolwide level, RTI is consistent with other best practice and federal policy initiatives that govern schools today, and therefore provides schools a model through which they can work toward greater policy coherence and IPC.

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3

Schoolwide Screening

Academic and behavioral screening is regarded as a central feature of early intervention. This chapter helps readers understand the value and distinctive features of screening. A number of alternative procedures and test instruments across content areas and grade levels are available for screening. The information provided in this chapter can be used to help school staffs make informed decisions about selecting and implementing screening instruments. In addition to providing definitions and descriptions of screening, we also provide implementation checklists and school-based examples of how screening functions within an RTI process.

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Definitions and Features

What Is Screening?

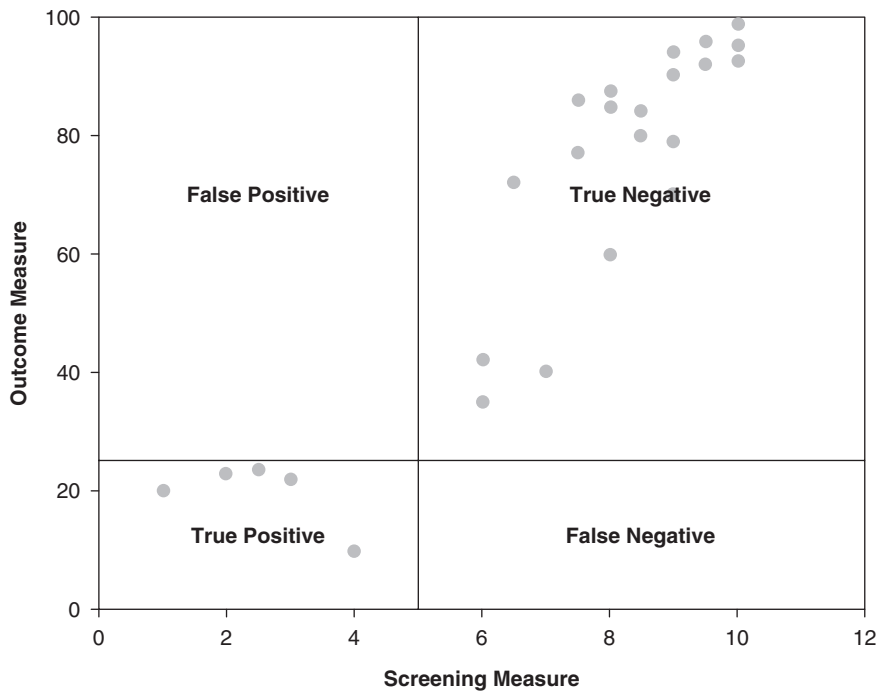
An important first step in any prevention approach is school-wide screening of students to accurately identify those who are at risk for learning difficulties. Screening is a type of assessment characterized by quick, low-cost, repeatable testing of age-appropriate critical skills (e.g., identifying letters of the alphabet or reading a list of high-frequency words) or behaviors (e.g., tardiness, aggression, or hyperactivity).

The basic question for a screening measure is whether the student should be judged as "at risk" for the target behavior. An example of a well-known screening instrument is the Snellen eye chart (Snellen, 1862). Using that eye chart, the school nurse screens students for potential vision problems. A student who has difficulty reading the chart is referred for more in-depth assessment of the specific problems he appears to be experiencing. Similarly, students may be screened for academic problems in a specific academic area, such as reading. The screening in this case is used to determine which students are at risk for encountering difficulties in learning to read. Students identified as at risk for reading problems are then referred for a more in-depth assessment of their reading ability.

For a screening measure to be useful, the measure must achieve an appropriate balance of accuracy and efficiency (Jenkins, 2003). Each of these features is described in detail below.

Accuracy

The critical feature of a screening tool is its ability to accurately classify students as being at risk or not at risk. A perfect screen would have a 100% accurate classification rate, as depicted in Figure 3.1. In this figure, the screening tool has correctly identified students who are not at risk for reading failure and do not later develop reading problems. Additionally, students who are at risk and later develop problems have been accurately identified. Unfortunately, achieving perfect results with a screening tool is highly unlikely. Therefore, schools must consider accuracy in relation to the sensitivity and specificity of the measures. *Sensitivity* is a screening measure's ability to identify "true positives"; that is, those students who perform poorly on the screen and do have reading problems, and, therefore, will require more intense levels of instruction and intervention to learn to read well. *Specificity* refers to the screening measure's ability

Figure 3.1 The Ideal Screen

NOTE: Setting a cut score of 5 on the screening measure accurately discriminates between those at risk (true positive) and those not at risk (true negative).

to identify “true negatives”; that is, those students who do not perform poorly on the screen and do not have reading problems.

Because screening does not directly result in a diagnosis, it is better for a screening instrument to err on the side of false positives (identify students as at risk that might not be at risk). Therefore, a wider net with which to capture potentially at-risk students can be cast with screening measures. However, because identifying more students as at risk requires resources for further assessment and possibly intervention, schools need to maintain data on how well their screening measure identifies students as at risk. An example of a data chart that might be helpful in tracking the accuracy of screening measures is presented in Figure 3.2.

Factors that can affect a screening measure’s sensitivity and specificity include whether the measure is criterion- or norm-referenced, and what cut scores distinguish levels of performance. (A *cut score* is the point that represents the dividing line between students who are not at risk and those who are potentially at risk.) Screening measures

Figure 3.2 School-Level Data Collection Sheet to Adjust Cut Scores

<i>Student ID</i>	<i>Grade Level</i>	<i>Fall Screen Score</i>	<i>Winter Screen Score</i>	<i>Spring Screen Score</i>	<i>District Reading Assessment</i>	<i>Grade Point Average</i>	<i>State Reading Assessment</i>

NOTE: Once data are entered, creating graphs that plot screening scores as the x (horizontal) axis and outcome scores as the y (vertical) axis will provide visual support for determining or adjusting cut scores and determining how well the screening measures are predicting later outcomes. Running correlational analyses of data also gives an estimate of the screen's predictive validity.

can use either a criterion- or a norm-referenced standard of performance. A *criterion-referenced measure* compares a student's performance to a predetermined performance level on a set of academic goals. An example of a criterion-referenced measure for reading might include a student reading a passage at grade level, with a goal of correctly reading a specified number of words a minute. Any student who fails to meet that measure would be considered at risk for reading problems. The important consideration in selecting a criterion-referenced measure is ensuring that it has strong predictive validity of a given academic skill (Jenkins, 2003). For example, how well does performance on oral reading fluency predict a student's overall reading ability? Maintaining data and conducting regression analyses can help schools answer this question and adjust their screening procedures accordingly. For instance, how well does the screen predict performance on the outcome?

A *norm-referenced measure* compares the screening results to an appropriate target group (e.g., other students the same grade). Students

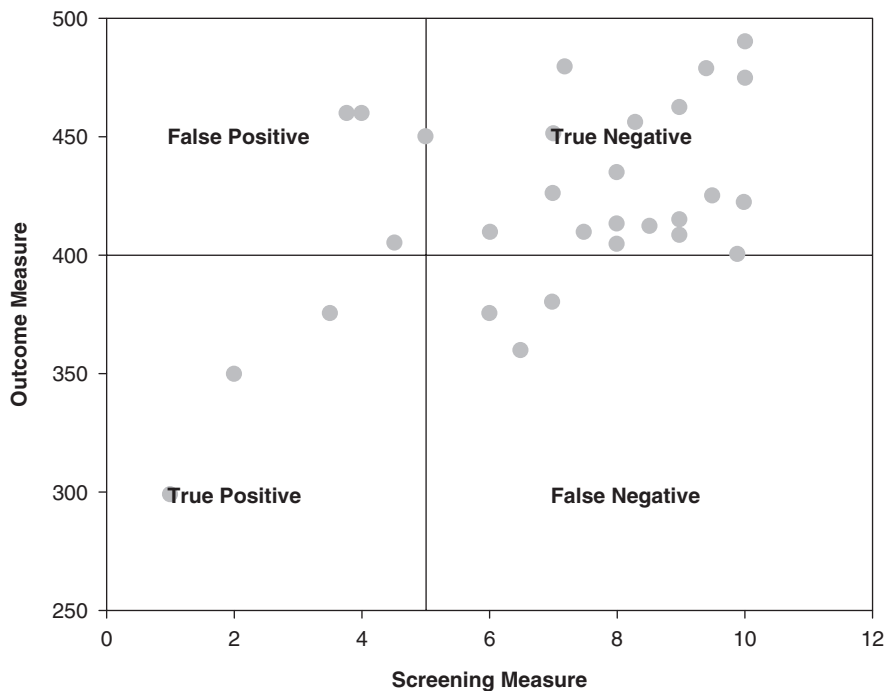
who fall within a predetermined percentile would be considered at risk for the relevant academic area. For example, if oral reading fluency is the measure, with a norm-referenced screen students whose score fell within the bottom 25% of all scores across the grade level might be identified as at risk for reading problems.

Criterion-referenced measures are preferred in the screening process because they give more accurate information about performance on relevant skills. In selecting a criterion-referenced measure, schools should attempt to link the measures at each grade level to existing performance measures, including performance standards in the school's curriculum (Jenkins, 2003). The content must be relevant to grade level and the skill in question (Jenkins).

Accuracy of screening is also determined by the cut scores that are used to distinguish students as being at risk or not at risk. Adjusting cut scores can affect the screening tool's sensitivity and specificity (Catts, 2006). Using the information collected in a data collection system such as the one presented in Figure 3.2, a school can plot performance on the screening measure with subsequent performance on the targeted skill. Figure 3.3 shows an example of the distribution of scores on a screening measure and subsequent performance on the state assessment. In this example, the outcome measure has a performance standard of 400 (e.g., students performing at or above this standard are considered proficient in the academic content or skill). As a result, students whose scores fall below that standard are considered to be not proficient. Figure 3.3 presents only one possible example of a cut score to identify students as at risk for not meeting standard on the outcome measure. Figure 3.4 shows the same distribution of scores; however, in this graph, the cut score has been adjusted, leading to changes in the sensitivity and specificity of the screening measure. The number of true positives and true negatives changed with the change in the cut score. True positives increased but the number of true negatives decreased. Also, the false positives increased and would be judged as at risk. The number of misses or false negatives decreased. School staff must weigh the consequences of such changes. Although many educators would agree it is better to identify more students as at risk, a negative consequence would be the strain on resources to provide intervention.

Efficiency

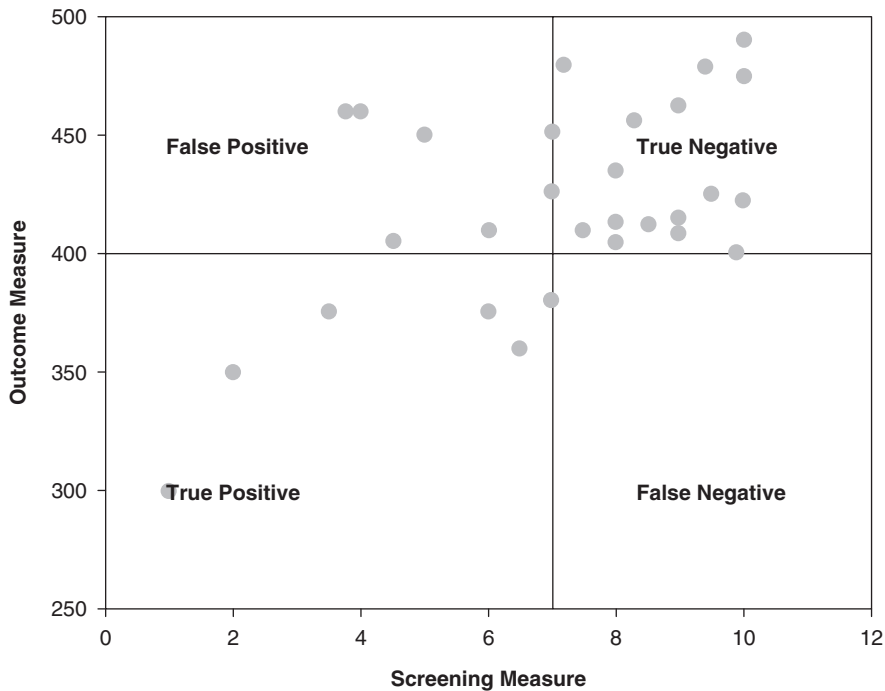
A second critical feature of a screening procedure is that it must be brief and easy to implement reliably (Jenkins, 2003). Although

Figure 3.3 Screening and Outcome Measures With Cut Scores

NOTE: Setting the cut score on the screening measure at 5 identifies six students as being at risk and places one student on the cut line. Three students identified as at risk have successful reading outcome measures. If we err on the side of caution and classify students on the screening cut score as at risk, this screening measure has sensitivity of 50% and specificity of 87%.

increasing the breadth and depth of a screening procedure can help improve its accuracy in correctly classifying students, schools must consider the cost benefit of such changes. For example, given the many components of reading (phonemic awareness, decoding, fluency, vocabulary, and comprehension), a screening procedure may encompass assessment of one, some, or all of these components to predict reading problems. Whereas a combination of measures may result in more accurate identification of students as being at risk or not being at risk, administering several measures to all students requires a significant increase in resources for screening. Conversely, identifying too many students as being at risk because a screening measure is brief, but not very accurate, requires a significant increase in resources for subsequent progress monitoring and intervention.

Research on screening for reading problems in early grades has demonstrated that a screening procedure that consists of the following

Figure 3.4 Changing the Cut Score Changes Who Is Judged as At Risk

NOTE: If we err on the side of caution and identify students on the cut lines as at risk, increasing the cut score on the screening measure to 7 identifies 13 students as at risk. Seven students identified as at risk have successful reading outcomes. This screening measure has sensitivity of 100% and specificity of 70%.

reduces the number of false positives while maintaining an efficient screening procedure:

- Universal screening conducted three times over the school year
- Subsequent progress monitoring in Tier 1 for a period of five to six weeks for students identified as at risk by the screening measure (Compton, Fuchs, Fuchs, & Bryant, 2006)

Implementation

Implementing academic and behavioral screening poses several challenges, including administrative issues such as scheduling and record keeping. The greater challenges, however, are associated with ensuring

Table 3.1 Essential Task List for Screening**Directions**

In the second column, *Responsible Person(s)*, write the name(s) of the individual or team who will assume responsibility for the task identified in the first column. In the third column, *Timeline/Status*, write the deadline for the task and/or the status of the task.

<i>Task</i>	<i>Responsible Person(s)</i>	<i>Timeline/Status</i>
Review your screening instrument's items to be certain that content is aligned with the curriculum for each grade level.		
Once a tool has been selected, determine and secure the resources required for implementation (e.g., computers, folders and copies, testing areas).		
Determine initial professional development needs and ongoing training support.		
Administer the screening measure three times a year (early fall, midterm, and late spring).		
Create a database that aligns with the screening instrument to hold student information and scores.		
Organize the screening results (e.g., graphs and tables) to provide a profile of all students and comparisons with each other.		
Monitor results at the classroom level and make decisions about when teachers or instructional programs require more scrutiny and support.		
Add screening results to a database so that students' performance can be monitored over time.		
Specify written steps to follow when further scrutiny is needed for students judged to be at risk.		

SOURCE: Mellard & McKnight, 2006.

that the staff has the knowledge to use the screening results in curricular decisions regarding their class and individual students. Screening measures can help inform instruction, but the measures themselves should not drive instruction. Table 3.1 identifies the essential tasks that school and district level staffs must consider to implement academic and behavioral screening.

What Is the Role of Screening Within an RTI model?

In the RTI model, proactive screening procedures are best used at least three times an academic year (at the beginning, middle, and end) and are used as general screening procedures for all students. Screening results can be used to target students who may be at risk by comparing their performance relative to a criterion or normative index of performance.

Screening is important because it represents the first gate or point of entry into subsequent tiers of RTI instruction (e.g., Tier 2, secondary interventions; and Tier 3, tertiary interventions). Screening is not a one-time event but rather is an iterative process taking place during the school year and across grade levels. During the course of general instruction (Tier 1), the school uses schoolwide screening in essential academic areas to identify each student's level of proficiency (usually three times a year). The screening data are organized to allow for comparison of both group (e.g., class) and individual performance. Comparisons of group performance can provide feedback about class performance to school leadership to identify when a teacher may require additional support, for example. Individual performance helps identify students who are potentially at risk for not acquiring the academic skill.

As mentioned, ideally, screening should be conducted at least three times a year. One-time screening at the beginning of the school year can overidentify students as at risk (Fuchs & Fuchs, 2006). That is, one-time screenings at the beginning of the school year yield more false positive errors than is generally acceptable. Research examining standards for screening suggests that one way to help make the screening process more efficient is to combine screening with five to six weeks of supplemental progress monitoring for students identified as at risk on the initial screen (Compton et al., 2006). The supplemental progress monitoring provides a way to reserve Tier 2 interventions for students who continue to show signs of being at risk for reading difficulties (Compton et al.).

Table 3.2 Standards for Judging High-Quality Screening**Directions**

Read each of the standards that have been identified as mechanisms for judging high-quality screening. The checklist is formatted so that you can indicate current and planned implementation.

- If the practice has been implemented, indicate that with a checkmark (✓).
- If the practice is being developed, rank by priority. Indicate 1 = of highest priority through 3 = of lowest priority. (Thus, practices ranked as "1" would be implemented before those ranked as "2," and those ranked as "2" would be implemented before those ranked as "3.")

<i>Standard</i>	<i>Status</i>	
	<i>In Place</i> (✓)	<i>Priority</i> (1–2–3)
Screening is schoolwide, meets accepted psychometric standards, ¹ and has evidence of documented reliability ² and concurrent ³ and predictive ⁴ validity within the particular school setting.		
Individuals involved in the administration, scoring, and interpretation of the screening measures are appropriately trained.		
The site obtains screening data following a designated, fixed schedule.		
Data resulting from screening are documented and analyzed to refine the process.		
An established data-management system allows ready access to students' screening data.		
Cut scores are reviewed frequently and adjusted as necessary.		
A rationale is provided for the cut scores and decision rules (e.g., normative or specific criteria reference).		

NOTES

1. Psychometric standards are the theoretical approaches and procedures used to measure the difference between individuals' knowledge, attitudes, abilities, and personality traits.
2. Documented reliability is the extent to which a measurement yields consistent results over repeated testing of the same measure under identical conditions.
3. Concurrent validity occurs when a new measurement or test correlates well with a previously validated measure.
4. Predictive validity is the extent to which performance on one measure predicts performance on a later, related measure.

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Standards for Judging High-Quality Screening

Screening tools must be aligned with the requirements of the school district, school site, and curriculum. The process outlined in this chapter can help a school develop screening measures that reach the optimal balance between accuracy and efficiency to correctly identify those students whose performance warrants intervention. Table 3.2 presents standards for judging high-quality screening that are based on the research in this area and that were used as part of a national effort to identify model RTI sites (Mellard, Byrd, Johnson, Tollefson, & Boesche, 2004).

Changing Structures and Roles

As with most elements within the RTI model, implementation of schoolwide screening procedures necessitates a closer collaboration among general education and specialist staff. Thus, when planning for the implementation of schoolwide screening, school leaders must include both the acquisition of resources and the time needed to administer screening. Schools must develop a standard procedure for identifying students as at risk. Additionally, the procedure will need to be adjusted based on existing data, so initial implementation also requires the development of a database that can accurately record screening, progress monitoring, and outcome data for students so that cut scores and criteria can be adjusted as necessary. This is an iterative, continual process. Table 3.3 divides school personnel into three areas and describes the responsibilities that personnel within these areas may be expected to undertake in schoolwide screening.

Challenges to Implementation

Universal screening in academic skills and behavior provides the information that determines which students enter Tier 2 in the RTI process and receive interventions (Fuchs & Fuchs, 2006). Therefore, accuracy of the screening measure is paramount. Additionally, because it is conducted schoolwide, screening needs to be efficient. As RTI moves to curricular areas beyond early reading, screening measures that have appropriate discriminant and predictive validity are required for areas such as math, writing, and, later, reading. Discriminant validity refers to the accuracy with which scores represent different knowledge, skills, and ability. For example, one would expect that reading and math scores reflect (discriminate) between students' knowledge in these two

Table 3.3 Changing Roles and Structures to Implement Screening**General Education**

- Administer schoolwide screening measurements across content areas according to schedule.
- Administer assessments, and chart and evaluate results.
- Identify students for further monitoring.
- Provide information to parents if using the results for reporting student progress.

Specialist and Support Staff

- Assist general education teachers in implementation efforts.
- Collect data on a screening tool and associated cut scores to inform the process.
- Collaborate with the general education teacher to determine which students require further assessment.

Administration

- Lead effort to create infrastructure for schoolwide screening.
- Provide necessary technology, materials, and resources.
- Provide initial and continuing professional development opportunities for new staff and refresher training for incumbent staff.
- Ensure fidelity of implementation through routine, periodic observation, and discussions with staff.
- Research the availability of screening tool options with staff committee to select appropriate tools and methods.
- Incorporate this system so that it meets multiple requirements, including for example, determination of average yearly progress for the No Child Left Behind Act (NCLB, 2001), and ongoing progress monitoring.
- Determine if classroom performance warrants intervention (i.e., entire class performance is considerably lower than other classes in the same grade level).
- Review aggregate data of classrooms with teachers and district personnel to inform decision making.

NOTE: *General Education* includes the general education teacher. *Specialist and Support Staff* includes special education, reading or learning specialists, related services personnel, and paraprofessionals. *Administration* includes building principals and assistants, as well as curriculum and/or assessment specialists at building or district levels.

academic areas. Predictive validity refers to the accuracy with which a score is indicative of future performance. The higher the predictive validity, the more useful that test would be. For example, a kindergarten-level reading-screening test should be highly predictive of students' future reading ability. Below are some of the challenges that schools should prepare for when adopting universal screening measures:

1. *Logistical Issues of Administration.* School leaders must coordinate the necessary resources to conduct universal screening. Resources include having sufficient copies of the assessment instrument; scheduling, including make-up dates for absentees or missing data; scoring and analyzing results; and database development and maintenance.

2. *Distinguishing Screening From Progress Monitoring.* Although universal screening and progress monitoring use many of the same features, they are two distinct components of an RTI model. Screening measures are implemented to quickly identify students who may be at risk in the targeted academic area, whereas progress monitoring is a more complex assessment tool that determines both performance and growth in the relevant skill. Screening has a role in predicting future performance; progress monitoring focuses on accurately representing students' current learning and performance. Even though screening tools may be administered several times throughout the school year, performance on screening measures is not equivalent to progress monitoring in the general curriculum. Chapter 4 discusses progress monitoring in more detail.

3. *Selection of Screening Measures.* As noted earlier in this chapter, the ideal screening measure would accurately predict those students who are at risk from those students who are not at risk for future academic or behavioral difficulties. At best, however, screening tools are imperfect measures that indicate that a student requires in-depth assessment. The important considerations in selecting a screening measure include (a) predictive validity of the measure to the outcome, (b) discriminant validity of the measure and related cut scores, and (c) ease of implementation.

In elementary school-age students, the screening content usually focuses on the critical skills of reading, writing, and math that will assist in the acquisition of content knowledge (e.g., science, social studies, and language arts) at higher grade levels. For students in middle and high schools, the screening measures must also consider predicting behavioral outcomes such as dropping out of school. Such predictions can incorporate academic markers, but must also consider other indicators such as tardiness, absenteeism, and discipline

referrals. These behavioral indicators become very important in decisions about interventions for older students.

4. *Determining Decision Rules.* The essential decision in the screening process is determining the criterion for classification. What is the cut score for determining risk? Some students will perform on the edge of the cut score, so guidelines must be established for determining when a particular student's performance warrants further investigation.

Screening in Practice

This section provides one school-based example of how screening occurs and how the results are used to inform decisions about curricular choices and students' tier placement.

Jefferson Elementary School, Pella, Iowa

Overview and Demographics

Jefferson Elementary School has a total enrollment of 500 students, with two sections each of kindergarten through third grade and six sections each of fourth and fifth grades. Nearly equal numbers of boys and girls attend the school. About 14% of the students (70) are eligible for free or reduced-cost lunch, and about 6.6% (33) receive special education services. Five percent (25) of the students are minority students, and the rest are Caucasian; 1.2% of the students (six) are English language learners.

Jefferson Elementary's RTI model consists of five tiers, in which the first four tiers represent interventions that become increasingly intense; the fifth tier is special education.

Screening for Reading Problems

Kindergarteners and first graders are screened using Dynamic Indicators of Basic Early Literacy Skills (DIBELS) (Kaminski & Good, 1998) assessments in the fall, winter, and spring. The school also uses DIBELS fluency and accuracy assessments for students in the second and third grades; and the Fuchs, Hamlett, and Fuchs (1997) fluency and accuracy assessments for students in the fourth and fifth grades. In addition to the fluency and accuracy measures, students in the second through fifth grades are assessed with the Iowa Test of Basic Skills in November, and the Gates-McGinitie (McGinitie, McGinitie, Maria,

Dreyer, & Hughes, 1999) in April. Second graders are also given the Gates-McGinitie in October.

Screening Data and Reference Points

When analyzing students' screening data, the school uses reference points, not specific cut scores. The reference points are used to indicate whether a student is performing below expectations and to guide school staff members as they determine appropriate interventions for students. The reference points, or scores, match up with proficiency scores of standardized tests.

No single score stands alone in determining interventions for students. Data from multiple sources are used to determine which students need instruction beyond Tier I and which interventions would be most effective in meeting student needs.

Analyzing Data

The literacy team, which includes general and special education teachers, reading intervention teachers, district staff, the curriculum director, and the principal, meets three times a year for Literacy Day sessions. These sessions, which occur just after districtwide student screenings, allow team members to review the districtwide screening data as well as data from the other schoolwide screening measures. Data are then used to make changes to student interventions and to identify students who require interventions that are more individualized and more intensive.

The team collects data on a "Literacy Day Data" sheet, which includes the names of the students in a class and scores earned by each of those students on fluency and accuracy measures, as well as the Gates-McGinitie comprehension and vocabulary tests. A companion sheet, "Literacy Day Notes," is used during meeting discussions to note a student's area of need, current intervention, and comments. An end result of the discussion is to make adjustments as needed based on student data. Students with skill deficits are considered for services, whereas students with extension needs are considered for gifted and talented placement.

Screening Challenges

Time is the biggest challenge. Staff members have trained a group of volunteers to administer fluency and accuracy screenings to reduce

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the time teachers spend on assessments. They also have student interns from Central College to help administer, score, and record data.

Determining appropriate screening materials is another challenge. Finding screening measures to assess particular skills is difficult. Additionally, using multiple sources of data to inform the decision-making process takes organization, time, and careful analysis.

Finally, using the data to make appropriate decisions regarding interventions has been challenging for Jefferson Elementary staff. The data must be collected, recorded, and sorted in a way that facilitates analysis. At times, student screening data suggest the need for an intervention for which the school has no resources.

Summary

When RTI is implemented with fidelity and rigor, all students should benefit. An initial step in the RTI process is ensuring that students who are at risk for academic or behavioral difficulties are identified as early as possible. Early identification avoids the added complications students encounter through repeated failure, including negative changes in self-concept and efficacy. Schoolwide screening provides the initial closer examination at students' learning and performance, and those screening results can be used for indicating those students needing closer monitoring and more intense interventions and supports than are available in the Tier 1 of general education.

Resources

The following resources may support your implementation of universal screening efforts:

- **National Research Center on Learning Disabilities**
(<http://www.nrld.org>)

The National Research Center on Learning Disabilities engages in research designed to help the learning disabilities field understand policies, practices, and prevalence of learning

disability identification as well as to identify best practices. This site includes two helpful resources for screening: a paper written by Jenkins (2003), and a presentation by Catts (2006).

- **Edcheckup (<http://www.edcheckup.com>)**

Offers an assessment system for screening student performance and measuring student progress toward goals in reading. This site offers a combination of free downloads and paid subscriptions that increase access to content.

- **EdProgress (<http://www.edprogress.com>)**

EdProgress is a consulting company that focuses on assessment, large-scale testing and accountability, and systemic reform. With research-proven training materials, measurement tools, reporting systems, and teacher training interventions, EdProgress helps teachers become more focused on teaching and learning for all students.

- **Evidence-Based Progress Monitoring and Improvement System (<http://www.aimsweb.com>)**

AIMSweb is a formative assessment system that informs the teaching and learning process by providing continuous student performance data and reporting improvement to students, parents, teachers, and administrators that enable evidence-based evaluation and data-driven instruction. Browsers must pay to view materials from the site.

- **Intervention Central (<http://www.interventioncentral.org>)**

This site offers free tools and resources to help school staff and parents to promote positive classroom behaviors and foster effective learning for all children and youth. The site was created by Jim Wright, a school psychologist from Syracuse, NY. Materials on the site are free.

- **Monitoring Basic Skills Progress (<http://www.proedinc.com/Scripts/prodView.asp?idProduct=1348>)**

Developed by Lynn Fuchs, Carol Hamlett, and Douglas Fuchs, Monitoring Basic Skills Progress is a computer program

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for conducting automatic curriculum-based measurement and for monitoring student progress in reading, math computation, and math concepts and applications. The computer program will provide immediate feedback to students on their progress, and provide individual and classwide reports to teachers to help them plan more effective instruction. Browsers must order and pay for materials from this site.

- **National Center on Student Progress Monitoring**
(<http://www.studentprogress.org>)

The Center's mission is to provide technical assistance to states and districts and disseminate information about progress monitoring practices proven to work in different academic content areas (Grades K–5). Materials on this site are free.

- **Reading Success Lab** (<http://www.readingsuccesslab.com>)

The Reading Success Lab provides software solutions to identify reading problems and improve reading skills. Some screening materials on the site are free, but browsers must order and pay for other materials.

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