

Responsiveness to Intervention and Learning Disabilities

*A report prepared by the National Joint Committee on Learning Disabilities
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The purpose of this National Joint Committee on Learning Disabilities (NJCLD) report is to examine the concepts, potential benefits, practical issues, and unanswered questions associated with responsiveness to intervention (RTI) and learning disabilities (LD). A brief overview of the approach is provided, including attributes, characteristics, and promising features, as well as issues, concerns, unanswered questions, and research needs. Issues related to RTI implementation, including use as an eligibility mechanism, parent participation, structure and components, professional roles and competencies, and needed research, are addressed. The report is neither a position paper nor a “how-to guide” for implementing an RTI approach.¹

Background

The concept of RTI has always been the focus of the teaching/learning process and a basic component of accountability in general education: In other words, does instruction (i.e., strategies, methods, interventions, or curriculum) lead to increased learning and appropriate progress? In the past few years, RTI has taken on a more specific connotation, especially in the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004),² as an approach to remedial intervention that also generates data to inform instruction and identify students who may require special education and related services. Today, many educators, researchers, and other professionals are exploring the usefulness of an RTI approach as an alternative that can provide (1) data for more effective and earlier identification of students with LD and (2) a systematic way to ensure that students experiencing educational difficulties receive more timely and effective support (Gresham, 2002; Learning Disabilities Roundtable, 2002, 2005; National Research Council, 2002; President’s Commission on Excellence in Special Education, 2002).

A key element of an RTI approach is the provision of early intervention when students first experience academic difficulties, with the goal of improving the achievement of all students, including those who may have LD. In addition to the preventive and remedial services this approach may provide to at-risk students, it shows promise for contributing data useful for identifying LD. Thus, a student exhibiting (1) significantly low achievement and (2) insufficient RTI may be regarded as being at risk for LD and, in turn, as possibly in need of special education and related services. The assumption behind this paradigm, which has been referred to as a dual discrepancy (L. S. Fuchs, Fuchs, & Speece, 2002), is that when provided with quality instruction and remedial services, a student without disabilities will make satisfactory progress.

¹ In this report, RTI is described as an approach, rather than a single model, because there are many variations on its basic theme.

² IDEA 2004, Sec 614(b)(6)(B): “In determining whether a child has a specific learning disability, a local education agency may use a process that determines if the child responds to scientific, researched-based intervention as part of the evaluation procedures described in paragraphs (2) and (3).”

Core concepts of an RTI approach are the systematic (1) application of scientific, research-based interventions in general education; (2) measurement of a student's response to these interventions; and (3) use of the RTI data to inform instruction. The consensus of the 14 organizations forming the 2004 LD Roundtable³ was that data from an RTI process should include the following:

1. High quality, research-based instruction and behavioral supports in general education.
2. Scientific, research-based interventions focused specifically on individual student difficulties and delivered with appropriate intensity.
3. Use of a collaborative approach by school staff for development, implementation, and monitoring of the intervention process.
4. Data-based documentation reflecting continuous monitoring of student performance and progress during interventions.
5. Documentation of parent involvement throughout the process.
6. Documentation that the timelines described in the federal regulations §300.532-300.533 are adhered to unless extended by mutual written agreement of the child's parents and a team of qualified professionals as described in §300.540.
7. Systematic assessment and documentation that the interventions used were implemented with fidelity.

Historical Perspective

Three major developments concerning the education of students with learning problems have coalesced to establish RTI as a promising approach. First, long-standing concerns about the inadequacies of the ability-achievement discrepancy criterion—which was a component of the Individuals with Disabilities Education Act of 1997 for identifying LD—have accentuated the need to develop alternative mechanisms for the identification of LD. At the LD Summit of August 2001, sponsored by the Office of Special Education Programs, RTI was the alternative proposed by several researchers (e.g., Gresham, 2002; Marston, 2001).

Second, special education has been used to serve struggling learners who do not have LD or other disabilities. An RTI approach has been suggested as a way to reduce referrals to special education by providing well-designed instruction and intensified interventions in general education, thereby distinguishing between students who perform poorly in school due to factors such as inadequate prior instruction from students with LD who need more intensive and specialized instruction.

A third major reason for the increased interest in an RTI approach has been the abundance of recent research on reading difficulties, in particular, the national network of research studies coordinated by the National Institute of Child Health and Human Development (NICHD). A number of NICHD research studies have demonstrated that well-designed instructional programs or approaches result in significant improvements for the majority of students with early reading problems. In summarizing this research, Lyon and his colleagues (2001) argued that early identification and prevention programs could reduce the number of students with reading

³ The 2004 LD Roundtable was a collaborative workgroup formed to provide recommendations and comments on IDEA 2004 regulations for the identification and eligibility of students with LD.

problems by up to 70%. These findings make a strong case for systematically providing early intervention in basic reading skills in primary grade general education classrooms.

An RTI approach resembles various initiatives from the past two decades to establish collaborative or consultative problem-solving mechanisms to design and implement effective interventions within general education for students who are experiencing difficulties. These mechanisms have been referred to as teacher assistance teams, regular education initiatives, prereferral interventions, and problem-solving teams. The exact composition and characteristics of such a collaborative problem-solving process may vary. It may involve professionals from general education, special education, English language learning, and pupil personnel services, as well as administrators and parents. Participants may interact in different ways (e.g., teacher–consultant, teacher–teacher dyads, teams of educators) and the process may involve multiple stages (e.g., beginning with a parent consultation or teacher–specialist dyad, and expanding as needed to a larger or more specialized problem-solving team). The constant factor is the use of a systematic problem-solving process involving such steps as (1) identifying and analyzing the problem, including collection of baseline data; (2) generating possible strategies or interventions; (3) implementing an intervention plan; (4) monitoring student progress to determine success; and (5) reviewing and revising plans as needed.

IDEA 2004 addresses the use of RTI in two respects. First, it allows for the use of RTI data as part of an evaluation for special education to assist in the identification and determination of eligibility of students with LD, conceivably as an alternative to use of the ability–achievement discrepancy criterion. Second, it creates the option of using up to 15% of Part B funds for “early intervening services...for students...who have not been identified as needing special education or related services but who need additional academic and behavioral support to succeed in a general education environment.”

Structure and Components

The application of RTI is typically understood within the context of a multitiered model or framework that delineates a continuum of programs and services for students with academic difficulties. Although no universally accepted model or approach currently exists, the many possible variations can be conceptualized as elaborations on or modifications of the following three-tiered model:

1. Tier 1: High quality instructional and behavioral supports are provided for all students in general education.
 - School personnel conduct universal screening of literacy skills, academics, and behavior.
 - Teachers implement a variety of research-supported teaching strategies and approaches.
 - Ongoing, curriculum-based assessment and continuous progress monitoring are used to guide high-quality instruction.
 - Students receive differentiated instruction based on data from ongoing assessments.

2. Tier 2: Students whose performance and rate of progress lag behind those of peers in their classroom, school, or district receive more specialized prevention or remediation within general education.
 - Curriculum-based measures are used to identify which students continue to need assistance, and with what specific kinds of skills.
 - Collaborative problem solving is used to design and implement instructional support for students that may consist of a standard protocol⁴ or more individualized strategies and interventions.
 - Identified students receive more intensive scientific, research-based instruction targeted to their individual needs.
 - Student progress is monitored frequently to determine intervention effectiveness and needed modifications.
 - Systematic assessment is conducted to determine the fidelity or integrity with which instruction and interventions are implemented.
 - Parents are informed and included in the planning and monitoring of their child's progress in Tier 2 specialized interventions.
 - General education teachers receive support (e.g., training, consultation, direct services for students), as needed, from other qualified educators in implementing interventions and monitoring student progress.

3. Tier 3: Comprehensive evaluation is conducted by a multidisciplinary team to determine eligibility for special education and related services.
 - Parents are informed of their due process rights and consent is obtained for the comprehensive evaluation needed to determine whether the student has a disability and is eligible for special education and related services.
 - Evaluation uses multiple sources of assessment data, which may include data from standardized and norm-referenced measures; observations made by parents, students, and teachers; and data collected in Tiers 1 and 2.
 - Intensive, systematic, specialized instruction is provided and additional RTI data are collected, as needed, in accordance with special education timelines and other mandates.
 - Procedural safeguards concerning evaluations and eligibility determinations apply, as required by IDEA 2004 mandates.

Variations on this basic framework may be illustrated by options often found within Tier 2. For example, Tier 2 might consist of two hierarchical steps, or sub-tiers (e.g., a teacher first collaborates with a single colleague, then, if needed, problem-solves with a multidisciplinary team, creating in effect a four-tiered model). Alternatively, more than one type of intervention

⁴ D. Fuchs et al. (2003) used the term *standard protocol* to refer to an approach in which students with similar difficulties (e.g., problems with reading fluency) are given a research-based intervention that has been standardized and shown to be effective for students with similar difficulties and uses a standard protocol to ensure implementation integrity. The term is used in this sense in this report.

might be provided within Tier 2 (e.g., both a standard protocol and individualized planning, based on the student's apparent needs).

RTI is a critical component of a multitiered service delivery system. The goal of such a system is to ensure that quality instruction, good teaching practices, differentiated instruction, and remedial opportunities are available in general education, and that special education is provided for students with disabilities who require more specialized services than what can be provided in general education. The continuous monitoring of the adequacy of student response to instruction is particularly relevant to an RTI approach as a means of determining whether a student should move from one tier to the next by documenting that existing instruction and support is not sufficient. For example, in moving from Tier 2 to Tier 3, insufficient responsiveness to high quality, scientific, research-based intervention may be cause to suspect that a student has a disability and should be referred for a special education evaluation. In addition, however, the right of a parent, state education agency, or a local education agency to initiate a request for an evaluation at any time is maintained in IDEA 2004.

Parent Participation

There is widespread agreement that parent-school partnerships are essential to improving educational outcomes for all students, including those with LD. The role and level of involvement of parents and families in an RTI approach can be shaped by answers to questions such as the following:

- What provisions are in place for including parents in state and local planning if an RTI approach is being considered?
- What provisions ensure that parents will be involved in all phases of the RTI?
- What written materials inform parents of their right to refer their child at any time for a special education evaluation as guaranteed under IDEA 2004?
- What written materials inform parents of the criteria for determining eligibility under IDEA 2004 and the role of RTI data in making that determination?

A concern often expressed by parents of students with LD about an RTI process is whether ongoing, meaningful involvement in their child's education will depend more on their own knowledge and initiative than on school efforts. Certainly, positive home-school partnerships will depend on commitment by both parents and school personnel.

Potential Benefits

An RTI approach, with its focus on student outcomes, may increase accountability for all learners within general education whether or not they are eventually referred for special education and related services. An RTI approach promotes collaboration and shared responsibility among general educators, special educators, teachers of English language learners, related service personnel, administrators, and parents.

In addition to these general education benefits, proponents of an RTI approach cite several other potential benefits:

1. Earlier identification of students by means of a problem-solving approach rather than by an ability–achievement discrepancy formula. An RTI approach has the potential to eliminate the “wait to fail” situation that occurs when an ability–achievement discrepancy formula is used to determine whether a student qualifies as having LD. When a psychometric formula is used to establish the discrepancy criterion, it is difficult to identify students as having LD until at least the third grade. Under an RTI approach, students may receive specialized interventions at a much earlier point in their schooling, and considerably in advance of any determination of special education eligibility (Vaughn & Fuchs, 2003).
2. Reduction in the number of students referred for special education and related services. One goal of an RTI approach is to distinguish students whose achievement problems are due to LD or other disabilities that require special education and related services from the larger group of students with achievement problems due to other causes. By providing appropriate instruction for students at risk as well as for those with LD, an RTI approach has the potential to reduce the number of students referred for special education and related services (see Deno, Grimes, Reschly, & Schrag, 2001; Ikeda & Gustafson, 2002; Tilly, Grimes, & Reschly, 1993).
3. Reduction in the over identification of minority students. The RTI approach shows promise for reducing the bias in the assessment of students from culturally and linguistically diverse backgrounds, and for providing a positive impact on the disproportionate placement of African-American students in special education. Marston, Muyskens, Lau, and Canter, 2003, noted a reduction in both the number of African-American students referred for evaluation and the number placed in special education over a 4-year period in the Minneapolis Public Schools when an RTI approach was used. Attention to and concern about possible bias is reflected in IDEA 2004, which requires that states not only keep track of how many minority students are being identified for special education, but also provide “comprehensive, coordinated, early-intervention programs” for students in groups that are determined to be overrepresented.
4. Provision of more instructionally relevant data than traditional methods of identification. An RTI approach emphasizes progress monitoring through the use of curriculum-based or classroom-based assessment, student portfolios, teacher observations, and criterion-referenced standard achievement measures. Thus, if a child is eventually identified as having LD, instructionally relevant information, whether it indicates what did not work or what has not yet been tried, will be available to guide the team in developing the student’s individualized education program (IEP).

RTI as an Eligibility Mechanism: Issues and Concerns

The use of RTI for determining eligibility for special education and related services has generated controversy, both on practical and conceptual grounds. These concerns focus on systematic errors and accuracy in identifying students with LD.

A particular concern is whether RTI is prone to systematic errors in identifying students with LD. For example, the underachievement criterion may exclude some high-ability students with LD from special education. These students, by compensating with their intellectual strengths and making good use of support services, often manage to achieve within the normal range and, therefore, are unlikely to receive the early individualized instruction that would enable them to make academic progress consistent with their abilities. As another example, there are students who are underachievers and do not respond to intervention who may be inappropriately identified as having a learning disability. This includes environmentally disadvantaged, minority, and English language learners who are overrepresented within the population of underachieving students and students who are at risk and in need of specialized supports and instruction for other reasons (e.g., lack of motivation, emotional stress).

Although RTI alone is not sufficient to identify a learning disability, RTI data could serve as an important component of a comprehensive evaluation for the identification of a learning disability and the determination of eligibility for special education and related services. Thus, RTI can establish a pool of at-risk students who may be in need of the multifaceted evaluation required by IDEA 2004 to determine if the student has a learning disability. However, research on large-scale implementation of RTI will be necessary to determine the efficacy of RTI for differentiating students with LD from those with other disabilities and from students without disabilities.

Implementation Issues

Basic Decisions About Implementation

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.

Resources

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.

Personnel Roles and Competencies

NJCLD has long been concerned with the professional preparation of general education teachers, special education teachers, related service providers, and paraprofessionals who serve students with LD. (See NJCLD papers entitled *Learning disabilities: Preservice preparation of general and special education teachers, 1997*; *Professional development for teachers, 1999*; and *Learning disabilities: Use of paraprofessionals, 1998*.) However, all of the RTI models currently being proposed, explored, or used will require new roles for and/or changes in the roles of instructional, related services, and administrative personnel.

New Roles for Professionals in Education

For all education professionals, the new instruction, assessment, documentation, and collaborative activities required for RTI implementation will create new challenges.

For example,

1. General education teachers will need to compile relevant assessment data through continuous progress monitoring and respond appropriately to the findings.
2. Special education, pupil personnel, related services, and other support professionals (e.g., special education teachers, speech-language pathologists, school psychologists, reading specialists, educational therapists, occupational and physical therapists, and audiologists) need to help design, interpret, and assess data as well as suggest instructional approaches.
3. Specialists, including special education teachers and LD specialists providing more intensive interventions, will be expected to master a variety of scientific, research-based methods and materials, and provide them with fidelity to groups of various sizes in different environments.
4. Administrative and supervisory staff will have to determine needed roles and competencies, existing skill levels, and professional development requirements in order to provide immediate and ongoing training activities in these critical areas.
5. Critical questions also will arise about how a particular RTI approach will affect the specific roles and competencies required of education professionals. Decisions about these roles and resulting needed competencies include the following:

- Who is to deliver and monitor the high quality instruction needed in the various settings of RTI?
- Who will schedule and determine the composition of each decision-making team?
- Who will manage and supervise placement, services, and follow-up activities?
- Who will have formal responsibility for ensuring that all professionals involved in an RTI approach possess the specific needed competencies and attitudes?
- Who will ensure ongoing involvement of and approval by parents?

In some cases, the answers to such questions may influence an RTI approach adopted, suggest needed adaptations, prompt professional development efforts, or result in delay, scaling back, or abandonment of a specific RTI approach. Answers to these questions may lead to additional ones, such as (1) are there competencies unique to successful teaching of students with LD, (2) how can the needed competencies be developed in novice and experienced professionals, and (3) which competencies best match the roles and competencies of RTI models?

New Competencies in Professional Educators

Competencies in LD. Effective implementation of RTI requires new roles for school personnel who serve students with LD. There may be an overlap between the competencies required of special education, general education, and related service providers. Uncertainty exists about the levels of competence required for fulfilling the diagnostic, instructional, collaborative, and consultative roles expected of personnel who serve students with LD. For example, an RTI approach will require that (1) general education teachers provide evidence-based, differentiated instruction, continuous data monitoring, and timely identification of nonresponsive students, and (2) the general education teacher or specialist will provide individualized, more intensive instruction for nonresponsive students in one of several settings. These two examples suggest that schools will need a staff with a wide range of competencies.

Other Factors Affecting Competency. One of the most fundamental questions about ensuring competence in teachers and related service professionals focuses on the skills critical for beginning professionals, in contrast to those expected of experienced, but perhaps less up-to-date, practicing professionals. Most seem to agree that field experiences and mentoring are vital to the success and retention of beginning professionals. Similarly, there is general agreement that recent instructional research, especially in early decoding skills needed for reading, must be integrated into the practice of both beginning and practicing teachers. Less evident but equally important are collaborative skills for all personnel. In school cultures that treat general education and special education as separate, it may be difficult to develop the interdependence expected in an RTI approach. Strategic planning and staff development will be needed to address all of these factors and support the successful implementation of RTI.

Documenting Competencies and Qualifications. The impact of factors such as state licensure, higher education accreditation, certification routes, private agency training, and the requirements of No Child Left Behind and IDEA 2004 will be important considerations if the needed competencies are to be internalized and applied in practice with individual students in the range of RTI settings.

The most common way to recognize qualifications and competence in the professions, including teaching, is documentation from a recognized state agency or professional organization. State certification or licensure by a state is generally considered evidence of competence in the area for which it is received. More recently, other routes have become available, such as alternate certification, the National Board for Professional Teaching Standards certification, certificates from nonprofit organizations, and formal recognition from a variety of other entities that acknowledge training and/or experience. Each of these provides potential routes for documentation of competencies needed to contribute effectively within an RTI approach.

Recruitment and Retention of Qualified Personnel. A critical problem is ensuring the availability of highly qualified teachers to provide effective instruction, intervention, and collaboration. Whether the new responsibilities of an RTI approach, especially when successful, will motivate teachers to stay in classrooms (i.e., if it acts as a career ladder) is an empirical question.

Research

Current research on RTI can be characterized as having two strands: (1) intervention studies investigating the efficacy and delivery of special remedial methods and (2) field studies evaluating the RTI process itself. Intervention studies, such as the NICHD research summarized earlier, address the types of interventions that presumably would be implemented in an RTI approach. This research has formed the basis for introducing language in IDEA 2004 that permits school districts to “use a process that determines if the child responds to scientific, research-based intervention as part of the evaluation procedures” for identifying a learning disability.

Intervention Studies

The primary focus of intervention studies on LD, to date, has been reading (i.e., phonemic awareness and word decoding) in the early grades. Experimental evidence indicates that various reading interventions in the primary grades may be used without loss of efficacy if the interventions are evidence based. For example, Foorman and Torgesen (2001) described the different interventions used in four different Texas schools, which included different reading programs, different lengths of instruction, and different small group sizes. All four schools maintained satisfactory performance levels in early reading. Torgesen et al. (2001) found that two different reading programs gave essentially the same outcomes when both were used in intensive one-to-one instruction. When McMaster, Fuchs, Fuchs, and Compton (2003) explored outcomes of three interventions (Peer Assisted Learning Strategies [PALS], adapted PALS, and one-to-one tutoring 35 minutes per day three times per week), they found no statistically significant differences in reading among the three groups. It would seem that, taken as a group, these studies suggest that instruction in small groups with high response rates, immediate feedback, and sequential mastery of topics—all typical of good teaching—are more important than the specific evidence-based program used (see Vaughn, Gersten, & Chard, 2000). Unfortunately, however, there is little information in intervention studies about if or how an RTI process is used. Finally, intervention studies need to be conducted to address higher level reading skills (e.g., reading comprehension) and other content areas (e.g., math computation and reasoning, written language) at different levels (i.e., middle and high school).

Field Studies

The use of an RTI approach in actual practice is the focus of field studies, which explore the application of a problem-solving approach using either standard protocols or individualized interventions (e.g., Conway & Kovaleski, 1998; Ikeda & Gustafson, 2002; Marston et al., 2003; McNamara & Hollinger, 2003). These studies have found that RTI has lowered the proportion of minority students identified as having LD (Marston et al., 2003) and have changed the way support services were used (Ikeda & Gustafson, 2002).

Their findings, however, did not address a number of key questions, such as the success rate at each grade level, the number of students who received interventions beyond the first three grades, the number of students who received interventions and returned to general education but needed subsequent interventions, and criteria for movement between tiers. Information on the latter issue would be especially useful to educators. Is achievement determined by classroom, local, state, or national norms, and/or by reaching benchmarks? Choice of the expected achievement level becomes critical for determining the number of students eligible for intensive instruction, as does the choice of the test itself and the constructs for which it serves as an indicator or marker. When various districts make different choices, an increase in the variability of eligible students from district to district also can be expected to increase.

There is little information from the field studies about the instructional methods and materials used and about whether interventions are research based, the number of students in the studies identified as having a learning disability having other disabilities or not having a disability, or the number being served in special education after leaving the primary grades. Other questions yet to be addressed include the following: (1) How many different interventions should be used until a child is considered nonresponsive? (2) If the intervention is based solely on what is taught in the general classroom, but more intensively, in smaller groups, or for longer periods of time, how successfully does the child keep up with the general education curriculum? (3) If the intervention is different from classroom instruction, how successful are the transitions back to the classroom? Transitions become especially relevant in the higher grades because a student who had a focused, individualized intervention may return to a classroom where the pace is much quicker, learning is from lecture and textbook, and the vocabulary is much more specialized and dense. As D. Fuchs, Mock, Morgan, and Young (2003) noted, “the higher the level, and the more specialized and intensive the instruction, the greater the disjunction between it and the classroom” (p. 168).

Medium- and large-scale field studies of the RTI process are being encouraged and accelerated by the National Research Center on Learning Disabilities (NRCLD), jointly coordinated by faculty at Vanderbilt University and the University of Kansas and funded by the U.S. Department of Education. The overarching goal of the NRCLD is to conduct research, develop recommendations, and provide training to help administrators, teachers, parents, and policy makers address the complex issues surrounding the identification of students with LD who need special education and related services (NRCLD, 2005).

The NRCLD, working with the six Regional Resource Centers, is charged with identifying and studying sites noted for using best practices with respect to RTI. Sites that demonstrate effective RTI use and that meet criteria enabling replication can become exemplars and studied as large-scale pilot projects and, perhaps, recommended for broad adoption. The long-term goal is to

identify sites that successfully demonstrate over time improved achievement and academic success beyond elementary school for all students, including those students with LD, students with other disabilities, and students without disabilities. These models would then be recommended to states as models for broad adoption (NRCLD, 2003, 2004).

The Need for Further Research

While there is a pressing need for research and evaluation data about RTI, it is an enormously complex undertaking. The need for evaluating the implementation of RTI in actual practice, particularly in large-scale applications, is paramount. However, it is important to acknowledge that the outcomes of RTI implementation will vary on a number of key factors, such as selection and fidelity of interventions, decisions about time frames, criteria for movement among tiers, resources, and staff training. These and other key factors will affect generalization and replication of results. Strict adherence to meeting established research standards is critical for informing instruction and vital for improving the academic outcomes and life success for students with LD.

Summary

In recent years, a problem-solving approach referred to as responsiveness to intervention (RTI) has received increased attention as a process of remedial interventions that can help generate data to guide instruction and identify students with learning disabilities (LD) who may require special education and related services. Core concepts include the systematic (1) application of scientific, research-based interventions in general education; (2) measurement of student responses to the interventions; and (3) use of the response data to change the intensity or type of subsequent intervention.

Historically, RTI refines earlier initiatives such as prereferral intervention and teacher assistance teams. Recent interest in RTI has emerged from concern about the inadequacies of the ability–achievement discrepancy criterion for identifying LD, the need to reduce referrals to special education by using well-designed instruction and intensified interventions in general education, and the recent NICHD-coordinated research on early reading difficulties indicating that early intervention could significantly reduce reading problems in students. IDEA 2004 now includes language permitting the use of data from a process that determines if the child responds to scientific, research-based intervention as part of the evaluation procedures as an alternative criterion to the ability–achievement discrepancy. In addition, up to 15% of Part B funds can be used for “early intervening services...[for those needing] additional academic and behavioral support....”

Although there is no universal RTI model, it is generally understood to include multiple tiers that provide a sequence of programs and services for students showing academic difficulties. Briefly, Tier 1 provides high-quality instruction and behavioral supports in general education, Tier 2 provides more specialized instruction for students whose performance and rate of progress lag behind classroom peers, and Tier 3 provides comprehensive evaluation by a multidisciplinary team to determine if the student has a disability and is eligible for special education and related services.

Although parent participation is widely recognized as essential to improving educational outcomes for students, many parents express concern about whether ongoing, meaningful involvement will occur in an RTI model. How will they be included in state and local planning? Involved in all phases of an RTI process? Informed of their referral rights? Will their child's education depend more on their own knowledge and initiative than on school efforts? Certainly, positive parent-school partnerships will depend on commitment by both home and education professionals.

Potential benefits cited by RTI proponents include (1) earlier identification of students with LD using a problem-solving approach rather than an ability-achievement discrepancy formula with the expectation of minimizing "wait to fail," (2) reduction in the number of students referred for special education, (3) reduction in the overidentification of minority students, (4) data that are maximally relevant to instruction, (5) focus on student outcomes with increased accountability, and (6) promotion of shared responsibility and collaboration.

While RTI seems to encourage addressing the needs of students at risk, the use of RTI for eligibility purposes has raised questions about whether RTI is prone to systemic errors in identifying students with LD. For example, some high-ability students with intellectual strengths and support may achieve in the normal range and be denied the individualized instruction enabling them to make academic progress consistent with their ability.

Although it is generally agreed that RTI can identify a pool of at-risk students, it does not appear to be sufficient to identify a specific learning disability. It may, however, serve as an important component of an evaluation for special education eligibility. Research data from large-scale implementation of RTI are needed to determine the efficacy of RTI for differentiating a specific learning disability from other disabilities and students without disabilities.

Before implementation of an RTI approach, many issues about the structure and components to be used, as well as how students will move through the process, must be addressed and efficacy research conducted. In selecting the number of tiers and instructional options, and timelines to be used, models will vary along a flexibility-rigidity continuum. The result will affect such factors as degree of individualization, cost of staff resources, and likelihood of replication. Factors that affect movement within and between tiers, such as cut scores, timelines for team decision-making, and where interventions are provided must also be resolved so that access to services is maximized and delay of services, including special education, is avoided.

Ensuring availability of needed resources is also an important step prior to implementation. What space and materials will be required? How will student and teacher schedules be affected? What time must be allowed for phase-in and professional development? How will the impact of increased documentation requirements be minimized? Especially unclear is the answer to the question of whether costs will increase or decrease and by how much.

Although NJCLD has long been concerned about professional preparation, RTI approaches will require new or changed roles for administrators, general education and special education teachers, and related services personnel. Questions arise about how needed professional development will be determined, provided, and followed-up. What are the specific competencies

required to provide high quality scientific, research-based interventions, continuous progress monitoring, and timely recognition of nonresponsiveness in general education? What types of field experience and mentoring are most helpful to novice and practicing teachers? How will collaborative skills be fostered within the culture of the school?

Once vital competencies are determined, the question of what documentation can ensure that those competencies are actually in the repertoire of professionals must be asked. Does state licensure address the needed competencies or are alternate certification, Board certification, or other formal documentation of competence useful? A related, and growing, personnel problem is the difficulty recruiting and retaining highly qualified teachers, especially when career ladders have not proved effective and advanced certification often results in teachers moving out of the classroom. It is not yet known whether the new responsibilities of RTI will motivate teachers to stay in classrooms.

Research on RTI has primarily focused on intervention studies that investigate the delivery and efficacy of instructional methods and materials or on field studies that explore the instructional components that might be incorporated into an RTI approach. Intervention studies, many of which have been conducted by the NICHD, formed the basis for the provision in IDEA 2004 that permits “use of a process that determines if the child responds to scientific, research-based intervention as part of the evaluation procedures” for identifying LD. Focusing on early skills in decoding, these studies have shown that many evidence-based early reading programs are equally effective, if instruction is focused, uses small groups, ensures high response rates, includes immediate feedback, and follows a sequential mastery of topics. Field studies of RTI have explored the actual practices applied in problem-solving approaches using either standard protocols or individualized interventions. Although existing studies have found changes in the way support services were used and identified a lower proportion of minority students as having LD, many key questions have not yet been addressed. These include student success rates over time and the numbers of children beyond third grade receiving continued interventions or returning to general education, as well as the effects of various criteria for adequate response to intervention and achievement norms or benchmarks based on classroom, local, or state criteria on eligibility for tiers or for special education and related services.

Of special interest is the work of the National Research Center on Learning Disabilities, which is seeking to identify and study medium- and large-scale RTI sites that use best practice and meet criteria enabling replication. Using these as pilot sites, the goal is to recognize RTI models that demonstrate improved achievement in students with and without disabilities beyond the primary years and assist others in adopting such proven models. While the need for such research and evaluation is pressing, it is also an enormously complex undertaking. Large-scale implementation of RTI will vary widely depending on factors such as the selection and fidelity of interventions, tiers, resources, timelines, and professional development. Careful reporting of such variables and adherence to established research standards will be critical to shaping RTI models that successfully inform and enhance instruction.

The National Joint Committee on Learning Disabilities intends that this paper will encourage study and consideration of the information, issues, and research related to RTI in order to guide

its thoughtful implementation, advance the field of special education, and enhance the academic outcomes and life success of all students, including students with learning disabilities.

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References

- Conway, S. J., & Kovaleski, J. F. (1998). A model for statewide special education reform: Pennsylvania's Instructional Support Teams. *International Journal of Educational Reform, 7*, 345–351.
- Deno, S., Grimes, J., Reschly, D., & Schrag, J. (2001). *PSM review team report*. Minneapolis: Minneapolis Public Schools.
- Foorman, B. R., & Torgesen, J. (2001). Critical elements of classroom and small group instruction promote reading success in all children. *Learning disabilities: Research and Practice, 16*(4), 203–212.
- Fuchs, D., Mock, D., Morgan, P., & Young, C. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities: Research and Practice, 18*(3), 157–171.
- Fuchs, L. S., Fuchs, D., & Speece, D. L. (2002). Treatment validity as a unifying construct for identifying learning disabilities. *Learning Disability Quarterly, 25*, 33–45.
- Gresham, F. M. (2002). Responsiveness to intervention: An alternative approach to the identification of learning disabilities. In R. Bradley, L. Danielson, & D. P. Hallahan (Eds.), *Identification of learning disabilities: Research to practice* (pp. 467–519). Mahwah, NJ: Erlbaum.
- Ikeda, M. J., & Gustafson, J. K. (2002). *Heartland AEA 11's problem solving process: Impact on issues related to special education* (Research Rep. No. 2002-01). Johnston, IA: Heartland Area Education Agency.
- Individuals with Disabilities Education Improvement Act (IDEA) of 2004, PL 108-446, 20 U.S.C. §§ 1400 *et seq.*
- Learning Disabilities Roundtable. (2002, July). *Specific learning disabilities: Finding common ground*. Washington, DC: American Institutes for Research. Retrieved from http://www.nclld.org/advocacy/Common_Ground.doc
- Learning Disabilities Roundtable. (2005, February). *Comments and recommendations on regulatory issues under the Individuals with Disabilities Education Improvement Act of 2004, Public Law 108-446*. Retrieved from <http://www.nasponline.org/advocacy/2004LDRoundtableRecsTransmittal.pdf>
- Lyon, G. R., Fletcher, J. M., Shaywitz, S. E., Shaywitz, B. A., Torgesen, J. K., Wood, F., et al. (2001). Rethinking learning disabilities. In C. E. Finn Jr., A. J. Rotherham, & C. R. Hokanson Jr. (Eds.), *Rethinking special education for a new century* (pp. 259–287). Washington, DC: Thomas B. Fordham Foundation. Retrieved from http://www.excellence.net/library/special_ed/index.html
- Marston, D. (2001, August). *A functional and intervention-based assessment approach to establishing discrepancy for students with learning disabilities*. Paper presented at the LD Summit, Washington, DC.
- Marston, D., Muyskens, P., Lau, M., & Canter, A. (2003). Problem-solving model for decision making with high-incidence disabilities: The Minneapolis experience. *Learning Disabilities: Research and Practice, 18*(3), 187–200.
- McMaster, K. I., Fuchs, D., Fuchs, L. S., & Compton, D. I. (2003, December). *Responding to nonresponders: An experimental field trial of identification and intervention methods*. Paper presented at the NRCLD symposium, Responsiveness to Intervention, Kansas City, MO. Retrieved from <http://www.nrclld.org>
- McNamara, K., & Hollinger, C. (2003). Intervention-based assessment: Evaluation rates and eligibility findings. *Exceptional Children, 69*(2), 181–193.
- National Joint Committee on Learning Disabilities. (1997). Learning disabilities: Preservice preparation of general and special education teachers. In *Collective perspectives on issues affecting learning disabilities* (2nd ed., pp. 99–107). Austin, TX: Pro-Ed.

- National Joint Committee on Learning Disabilities. (1998). Learning disabilities: Use of paraprofessionals. In *Collective perspectives on issues affecting learning disabilities* (2nd ed., pp. 79–98). Austin, TX: Pro-Ed.
- National Joint Committee on Learning Disabilities. (1999). Professional development for teachers. In *Collective perspectives on issues affecting learning disabilities* (2nd ed., pp. 69–78). Austin, TX: Pro-Ed.
- National Research Center on Learning Disabilities. (2003, June). *Information sheet for Regional Resource Centers*. Retrieved from <http://www.nrclld.org>
- National Research Center on Learning Disabilities. (2004). *Understanding responsiveness to intervention in learning disabilities determination*. Retrieved from <http://www.nrclld.org>
- National Research Center on Learning Disabilities. (2005). *National Research Center on Learning Disabilities mission*. Retrieved from <http://www.nrclld.org/mission.shtml>.
- National Research Council. (2002). *Executive summary: Disproportionate representation of minority students in special education*. Washington, DC: Author.
- President's Commission on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families*. Washington, DC: Author.
- Tilly III, W. D., Grimes, J., & Reschly, D. (1993, September-December). Special education system reform: The Iowa story. *Communiqué*, 22, 1-4.
- Torgesen, J. K., Alexander, A. W., Wagner, R. K., Rashotte, C. A., Voeller, K. S., & Conroy, T. (2001). Intensive remedial instruction for children with reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities*, 34, 33–58, 78.
- Vaughn, S., & Fuchs, L. (2003). Redefining learning disabilities as inadequate response to intervention: The promise and potential problems. *Learning Disabilities: Research and Practice*, 18(3), 137–146.
- Vaughn, S., Gersten, R., & Chard, J. E. (2000). The underlying message in LD intervention research: Findings from research syntheses. *Exceptional Children*, 67, 99–114.

Resources

- Bradley, R., Danielson, L., & Hallahan, D. P. (Eds). (2002). *Identification of learning disabilities: Research to practice*. Mahwah, NJ: Erlbaum.
- Donovan, M. S., & Cross, C. T. (2002). *Minority students in special education and gifted education*. Washington, DC: National Academy Press.
- Fletcher, J. M., & Reschly, D. J. (2005, Winter). Changing procedures for identifying learning disabilities: The danger of perpetuating old ideas. *The School Psychologist*, 10–15.
- Gerber, M. M. (2003, December). *Teachers are still the test*. Paper presented at the NRCLD symposium, Responsiveness to Intervention, Kansas City, MO. Retrieved from <http://www.nrclld.org>
- Hale, J. B., Naglieri, J. A., Kaufman, A. S., & Kavale, K. A. (2004, Winter). Specific learning disability classification in the new Individuals with Disabilities Act: The danger of good ideas. *The School Psychologist*, 6–13, 29–30.
- Kavale, K. A., Kaufman, A. S., Naglieri, J. A., & Hale, J. B. (2005, Winter). Changing procedures for identifying learning disabilities: The danger of poorly supported ideas. *The School Psychologist*, 16–25.

Scruggs, T. E., & Mastropieri, M. A. (2002). On babies and bathwater: Addressing the problems of identification of learning disabilities. *Learning Disabilities Quarterly*, 25, 155–168.

Vaughn, S. (2003, December). *How many tiers are needed for response to intervention to achieve acceptable prevention outcomes?* Paper presented at the NRCLD symposium, Responsiveness to Intervention, Kansas City, MO. Retrieved from <http://www.nrclld.org>

Vellutino, F., Scanlon, D., & Lyon, G. R. (2000). Differentiating between difficult-to-remediate and readily remediated poor readers: More evidence against the IQ-achievement discrepancy definition of reading disability. *Journal of Learning Disabilities*, 33, 223–238.