Response to Intervention (RTI): What Teachers of Reading Need to Know

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Clear definitions, details of relevant legislation, and examples of RTI in action help explain this approach to identifying and supporting learners who may be struggling.

In the most recent "What's hot, what's not for 2008?" *Reading Today* survey, 75% of prominent literacy researchers believed that Response to Intervention (RTI) was "very hot" and the same percentage believed that it should be "hot" (Cassidy & Cassidy, 2008). RTI is a new approach to identifying students with specific learning disabilities and represents a major change in special education law, the Individuals With Disabilities Act (IDEA). This change shifts the emphasis of the identification process toward providing support and intervention to struggling students early and is similarly reflected in the Reading First provisions of No Child Left Behind, which calls for proven methods of instruction to reduce the incidence of reading difficulties. RTI will alter the work of reading teachers because more than 80% of students identified for special education struggle with literacy (Lyon, 1995), and the law names "reading teachers" as qualified participants in the RTI process because of the International Reading Association's (IRA, 2007) lobbying efforts. However, RTI has only recently attracted the attention of the reading community (Bell, 2007), despite having roots in approaches such as prereferral intervention (Flugum & Reschly, 1994; Fuchs, Fuchs, & Bahr, 1990), curriculum-based measurement (Shinn, 1989), and Reading Recovery (Clay, 1987; Lyons & Beaver, 1995).

RTI in Theory

Background and Rationale

RTI was developed because of the many problems with the discrepancy model for identifying students with learning disabilities (e.g., Francis et al., 2005; O'Malley, Francis, Foorman, Fletcher, & Swank, 2002; Stanovich, 2005; Vellutino, Scanlon, & Lyon, 2000; Walmsley & Allington, 2007). In 1977, a learning disability was defined as "a severe discrepancy between achievement and intellectual ability" (U.S. Department of Education, 1977, p. G1082). In practice, this involves schools administering IQ tests and achievement tests and then examining scores for discrepancies between intellect and achievement to identify a learning disability (see Table 1). The discrepancy model has drawn four major criticisms. First, it requires that a learning problem becomes considerably acute in terms of an IQ/achievement discrepancy before a learner can receive additional support, a problem called "waiting to fail" (Vaughn & Fuchs, 2003, p. 139). Second, establishing a discrepancy is not necessary to improve outcomes for struggling readers, as students both with and without a discrepancy are qualitatively the same in their literacy instructional needs (Fuchs, Mock, Morgan, & Young, 2003; Vellutino et al., 2000). Third, the IQ/achievement discrepancy has shifted focus away from understanding the impact of other possible factors, such as opportunities to learn (Walmsley & Allington, 2007). These factors need to be considered prior to determining that a learning disability exists. Fourth, under the discrepancy model, many districts and states have seen skyrocketing percentages of students identified as learning disabled, particularly minorities (IRA, 2007; Walmsley & Allington, 2007).

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Table 1
Definitions of RTI Terms

Term	Definition
Discrepancy model	The standard for identifying students with learning disabilities based on the 1977 federal regulations. This process required that a significant difference be documented between a student's ability (IQ) and achievement in order for a learning disability to be identified. RTI models respond to the many problems identified with the discrepancy model.
Intervention	Targeted instruction provided in addition to the regular classroom program that addresses a student's documented instructional needs. Instruction that intends to prevent students who are struggling from falling farther behind their peers and intends to improve their future educational trajectory.
Level data	Information that reflects how students are performing in comparison to peers at a specific point in time.
Slope data	Information that reflects how a student is learning across time in comparison to his or her previous learning. These data capture rate of learning and can also be called growth rates. Slopes that are steeper show more growth over a smaller period of time than slopes that are flatter. Slope data are obtained by repeatedly measuring student performance in a particular area. They are displayed using a line graph.
Student progress monitoring	An assessment technique required by RTI regulations. Teachers administer quick assessments (1–5 minutes) frequently (weekly) to gauge the improvement of a student. The assessments provide information about the student's rate of learning and the effectiveness of a particular intervention (National Center on Student Progress Monitoring, 2007).
Literacy screening	The process of assessing the most basic and predictive literacy skills for all students in a school. The goal of screenings is to select learners whose reading achievement is significantly below standards. Literacy screenings are intended to identify students who require additional help so that further slippage and literacy failure can be prevented.

The Law

In 2004, IDEA, Public Law 108-446, introduced RTI language (U.S. Department of Education, 2006). In Table 2, the section entitled "Specific learning disabilities" (§ 300.307) asserts that states cannot be required to use the discrepancy model for identifying learning disabilities but may "permit the use of a process based on the child's response to scientific, research-based intervention." This is RTI, a process measuring whether a learner's academic performance improves when provided with well-defined, scientifically based interventions. In an RTI model, the "tests" of whether students possess learning disabilities are not standardized measures but students' measured responses to interventions. Within RTI, student potential (IQ) is replaced by a goal that allows for the evaluation of a performance relative to a defined academic standard (e.g., performance of other students in the class or grade level). Students responding quickly and significantly to interventions are less likely to possess a disability than students responding more slowly or not at all. However, data showing a student's response to an intervention serves as only one source of information for determining whether a learning disability is present. Learning disabilities cannot be diagnosed when appropriate instruction, socioeconomic status, culture, sensory issues, emotional issues, or English as a second language may be of concern.

In the section entitled "Determining the existence of a specific learning disability" (§ 300.309), the law states that a learning disability may be present when a student's performance is not adequate to meet grade-level standards when provided with appropriate instruction and research-based interventions. The term *appropriate* refers to instruction in the classroom that matches a student's skill level. The descriptors *scientific* or *research-based* indicate that interventions should be based on practices that have produced verifiable results through research studies.

Table 2
Additional Procedures for Identifying Children With Specific Learning Disabilities

IDEA terminology	IDEA definition
§ 300.307 Specific learning disabilities.	A State must adopt, consistent with 34 CFR 300.309, criteria for determining whether a child has a specific learning disability as defined in 34 CFR 300.8(c)(10). In addition, the criteria adopted by the State: • Must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability, as defined in 34 CFR 300.8(c)(10); • Must permit the use of a process based on the child's response to scientific, research-based intervention; and • May permit the use of other alternative research-based procedures for determining whether a child has a specific learning disability, as defined in 34 CFR 300.8(c)(10). A public agency must use the State criteria adopted pursuant to 34 CFR 300.307(a) in determining whether a child has a specific learning disability. [34 CFR 300.307] [20 U.S.C. 1221e-3; 1401(30); 1414(b)(6)]
§ 300.309 Determining the existence of a specific learning disability.	The group described in 34 CFR 300.306 may determine that a child has a specific learning disability, as defined in 34 CFR 300.8(c)(10), if: • The child does not achieve adequately for the child's age or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or State-approved grade–level standards: o Oral expression. o Listening comprehension. o Written expression. o Basic reading skills. o Reading fluency skills. o Reading comprehension. o Mathematics calculation. o Mathematics problem solving. • The child does not make sufficient progress to meet age or State-approved grade-level standards in one or more of the areas identified in 34 CFR 300.309(a)(1) when using a process based on the child's response to scientific, research-based intervention; or the child exhibits a pattern of strengths and weaknesses in performance, achievement, or both, relative to age, State-approved grade-level standards, or intellectual development, that is determined by the group to be relevant to the identification of a specific learning disability, using appropriate assessments, consistent with 34 CFR 300.304 and 300.305; and the group determines that its findings under 34 CFR 300.309(a)(1) and (2) are not primarily the result of: o A visual, hearing, or motor disability; o Mental retardation; o Emotional disturbance; o Cultural factors; o Environmental or economic disadvantage; or o Limited English proficiency. To ensure that underachievement in a child suspected of having a specific learning disability is not due to lack of appropriate instruction in reading or math, the group must consider, as part of the evaluation described in 34 CFR 300.304 through 300.306: • Data that demonstrate that prior to, or as a part of, the referral process, the child was provided appropriate instruction in regular education settings, delivered by qualified personnel; and • Data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction, which was provided to the child's parents.

Note. From U.S. Department of Education. (2006). *Assistance to states for the education of children with disabilities and preschool grants for children with disabilites* (Federal register 34 CFR Parts 300 and 301). Washington, DC: Author.

RTI Processes

The processes undergirding RTI have been used for evaluating the success of schoolwide supports, individualized interventions, and special education (O'Connor, Fulmre, Harty, & Bell, 2005; Powell-Smith & Ball, 2002; Taylor-Greene et al., 1997). However, in this article we focus on RTI as an initial referral and identification process for students suspected of having learning disabilities.

Step 1

Universal literacy practices are established. Prevention begins with universal literacy screenings to identify students who could be at risk (see Table 3). Any state receiving Reading First monies has identified a literacy screening in grades K–3. All students are screened on basic literacy skills approximately three times per year. Typically, student performance is compared with minimal benchmark scores and students not meeting benchmarks receive help.

Step 2

Scientifically valid interventions are implemented. When students do not meet benchmarks, they need additional instruction. Within most RTI models, interventions are first delivered to a small group and are intended to assist students in developing skills that will allow them to improve their reading skills.

Step 3

Progress of students receiving intervention instruction is monitored. RTI requires that progress-monitoring data are continuously collected as students receive interventions. Progress-monitoring assessments should address the skills that are being targeted for intervention and should indicate if the intervention is changing the student's reading. Also, the assessments should be administered repeatedly (weekly or biweekly) without introducing test-wise bias, which occurs when the results of an assessment reflect the testtaker's acquired knowledge about a test rather than true performance. In addition, the assessments should be sufficiently sensitive to small changes in the student's reading performance (i.e., those that might occur within a few days) because if students are showing growth on the more sensitive, microlevel progress-monitoring measures, they will also be showing growth in the more comprehensive measures (Deno, Mirkin, & Chiang, 1982; Fuchs & Deno, 1981; Riedel, 2007). Finally, progress-monitoring measures must be reliable, valid, and brief (National Center on Student Progress Monitoring, 2007). For a list of tools for progress monitoring, see the National Center on Student Progress Monitoring website at www.studentprogress.org/chart/chart.asp.

Step 4

Individualize interventions for students who continue to struggle. Students who continue to struggle despite receiving initial intervention instruction will require more intense, targeted interventions. These interventions may require additional assessments to clarify the nature of the difficulty. The data generated from these additional assessments should be used collaboratively by teachers, reading specialists, school psychologists, and parents to develop more intensive intervention strategies. Upon implementation, the student's progress continues to be monitored.

Step 5

A decision-making process to determine eligibility for special education services occurs when necessary. In the last step, a team of school-based professionals and the student's parents review all data to determine whether the student is eligible for special education services. Special services may be indicated when the student has not responded to interventions that have been well implemented for a sufficient period of time. If the team suspects that the student's lack of response may be explained by some other factor (i.e., not explained by a learning disability), then it should request additional assessment of the student's social, behavioral, emotional, intellectual, and adaptive functioning.

RTI in Real Life: Making a Difference for Mark

To illustrate RTI processes, we use a vignette (with pseudonyms) based on our experiences in schools. This vignette shows how a team including Donisha, a reading teacher, Julie, a special educator, Carol, a second-grade teacher, and Sandra, a school psychologist, worked collaboratively (and sometimes painstakingly) within an RTI model to assist a student named Mark.

Table 3
Examples of Literacy Screening Assessments

Screener	Authors
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	Good & Kaminski, 2002
Phonological Awareness Literacy Screening (PALS)	Invernizzi, Juel, Swank, & Meier, 2005
Texas Primary Reading Inventory (TPRI)	Texas Education Agency & University of Texas System, 2006
Illinois Snapshots of Early Literacy (ISEL)	Illinois State Board of Education, 2004

Step 1: Universal Literacy Practices Are Established

In September, Mark was administered the Phonological Awareness and Literacy Screening (PALS; Invernizzi, Juel, Swank, & Meier, 2005), an assessment that begins with two screening measures, the first-grade word list, given in the fall of grade 2, and a spelling assessment. From these measures, an entry benchmark score is formed. If the benchmark score does not meet the grade-level minimum, then additional diagnostics are administered (preprimer and primer lists, letter naming, letter sounds, concept of word, blending, and sound-to-letter). Students also read passages through which accuracy, reading rate, phrasing (a 3-point subjective scale), and comprehension scores are collected.

In the fall, Mark received a benchmark score of 22 (7/20 on the first-grade word list) and 15/20 on the spelling assessment. An expected benchmark score of 35, based on 15 words on the first-grade list, and 20 spelling feature points is expected for the beginning of second grade. Mark read instructionally at the primer level (1.1) with moderate phrasing and expression and answered five-sixths of the questions correctly. He read the 120 words in the primer story in 4 minutes and 20 seconds, a rate of about 28 words correct per minute (WCPM) and 20 words below the 50th percentile for second graders in the fall (Parker, Hasbrouck, & Tindal, 1992). When diagnostic assessments were administered, data showed that Mark had mastered alphabetic skills, such as phonemic awareness and letters. Carol described her initial analysis: "Mark seemed to have the basic building blocks for reading but needed more practice at his level." Initially, Mark received small-group classroom instruction, including reading daily in on-level materials and working with Carol on comprehension and decoding. In September, October, and November, Carol took running records on the books that Mark and the other students had been reading. Although the accuracy and book levels of other students were steadily increasing, Mark's accuracy was averaging 90% in less difficult books. Carol explained, "I felt like Mark needed more help, and we needed to act because I was concerned that he would continue to fall behind."

Step 2: Scientifically Valid Interventions Are Implemented

RTI requires that instructional interventions be scientifically valid, public, implemented with integrity, and systematically evaluated. Julie, who had recently attended the district's RTI workshop, explained that "The who, what, when, where, and how of interventions must be clear." The content of the intervention should be designated, the teacher responsible for implementing it identified, and the assessments determined. Often different team members plan, implement, or assess the intervention based on availability and expertise. For this reason, educators must collaborate and share information.

The team discussed Mark's needs and designed an intervention. Based upon its review of the data, the team determined that accurate, fluent reading in connected text seemed to be the problem. Mark could easily understand books above his reading level, but his progress was being impeded by word recognition. The group decided that an intervention increasing the amount of reading practice for Mark would build up his reading level. The designed intervention

comprised the following components: modeling of fluent reading, repeated readings, error correction, comprehension questions, and self-monitoring. They decided that Donisha would implement the intervention with three other students in the classroom in 20-minute sessions, three times per week. In addition, Carol continued to work with Mark in the classroom during small-group instruction. Specifically, she had Mark read from the same materials used by Donisha to further increase practice opportunities, and she set a daily goal for Mark on comprehension questions. Mark checked his answers each day and provided the results to his teacher at the end of the reading block.

Step 3: Progress of Students Receiving Intervention Instruction Is Monitored

As the intervention was implemented, Sandra tracked Mark's accuracy and fluency in reading passages at the primer and second-grade levels, because the goal was to understand Mark's progress toward grade-level norms. She used a PDA device loaded with passages at different levels. As Mark read these passages weekly, Sandra kept track of his accuracy (percentage of words correct) and reading rate (WCPM). Figure 1 shows Mark's accuracy and Figure 2 shows his reading rate before and after implementing the intervention for six weeks. Mark demonstrated some gains in accuracy and fluency, but his progress was not increasing at a rate that would allow him to meet established second-grade goals.

As we have described RTI to this point, it sounds smooth and trouble free. But it was anything but that for the professionals involved. Donisha's first reaction to RTI was strong:

> At first, I felt like this group was shrinking reading down to something very simplistic. I had to advocate for comprehension questions to be included in the intervention. Even though Mark's comprehension was fine, we did not want him to believe that comprehension didn't matter. We also clarified that interventions are *additive* and by nature narrower because their power lies in solving specific problems. The comprehensive reading program is broad and multifaceted, and it keeps going on while a child is receiving an intervention. So Carol wasn't going to stop guided reading or doing the rest of her program.

We liken the intervention and the reading program to a balanced diet. The intervention is like an extra serving of milk, but it doesn't replace meat, fruits, or vegetables.

Donisha was also concerned that the intervention would be scripted. Scripts are directions to teachers that are read verbatim during instruction. Interventions are specific and systematic, but nothing in the law requires them to be scripted.

Carol also had concerns. "I was not used to people asking me specific questions about exactly what I was doing, and how often, and what my results were. At first, it felt invasive and suspicious." Given the frequency with which blame is placed on classroom teachers, Carol's reaction was understandable. However, the team members pointed out that the instruction was working well for almost all of the other students and acknowledged the time limitations and demands placed on Carol as a classroom teacher. Although she had felt it in the past, Carol did not feel as though fingers were being pointed at her. Sandra had faced equal frustration before:

> I come in because a teacher has a concern and when I start asking questions, I get tight responses and defensiveness. It's like asking questions is stepping on toes. I can't help others further understand the problem or contribute to a useful intervention if we can't talk nitty-gritty. Once I had a teacher tell me, "You're not a teacher. You won't be able to help." While I am not a teacher, I can contribute to the development of interventions, and I have particular skill in measuring effects.

In addition to reviewing Mark's progress during the six weeks of intervention instruction, Mark's mid-year PALS scores were evaluated by the team. He was independent at the primer (1.1) level and barely instructional at the first-grade level with 14 errors and a reading rate of 42 WCPM. Despite his increase in instructional level and fluency, the team remained concerned about the lack of reduction in the number of errors that Mark was making. The team decided that these errors would ultimately become detrimental to Mark's fluency and comprehension, particularly as text increased in difficulty. The team determined that individualized intervention was warranted.

Step 4: Individualize Interventions for Students Who Continue to Struggle

Because they had no measure of decoding, the team decided to assess Mark using the Word Attack Test

Figure 1
Mark's Accuracy During Intervention Instruction

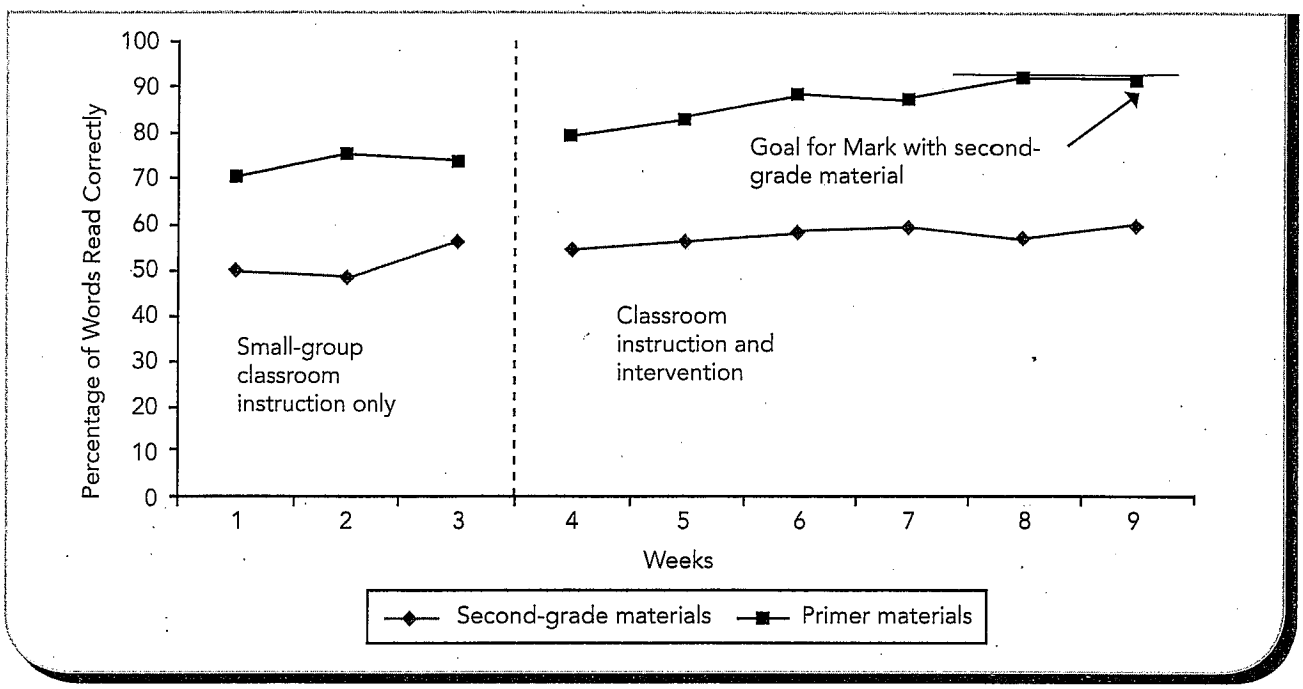
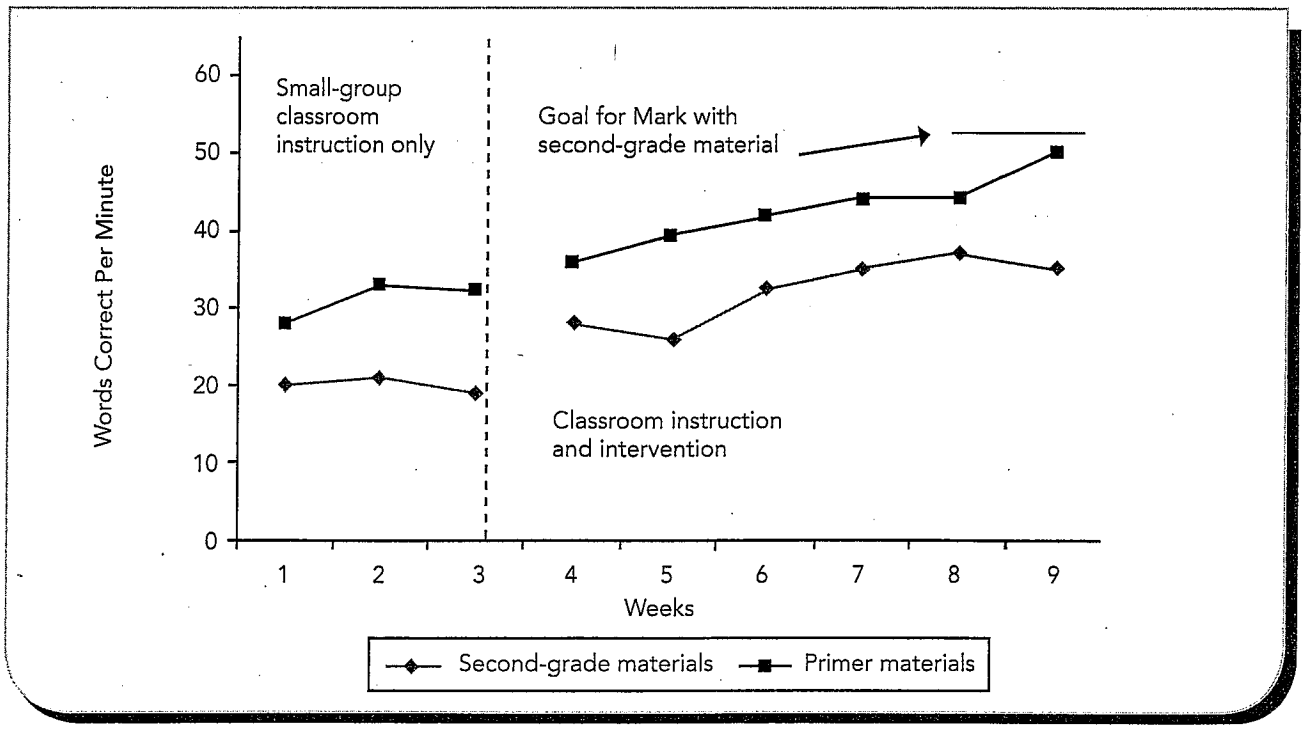


Figure 2
Mark's Fluency During Intervention Instruction



from the Woodcock Reading Mastery Test. Results from this assessment revealed that Mark was having difficulty decoding words with more than one syllable or those that contained difficult vowel patterns. This resulted in reduced accuracy and fluency. The team enhanced the intervention by adding practice with problem words. Mark practiced incorrectly read words, received instruction in how to analyze word parts, extended analytic skills to similar words, and practiced through word sorts. Following word sorts, Mark read each word within a sentence. Donisha implemented this individualized intervention for 10 minutes each day following the reading practice intervention (discussed earlier in the article).

Mark's reading accuracy and fluency continued to be monitored weekly by Sandra. The team determined that the intervention would be implemented for a minimum of 6 weeks, as this time frame would correspond with the end of the school year. However, the team recognized that interventions in early literacy often need to run longer, between 10 and 20 weeks, depending on factors such as the needs of the student and the intensity of the intervention (University of Texas Center for Reading and Language Arts, 2003; Wanzek & Vaughn, 2008). Moreover, Mark's progress was measured each week so that the intervention could be modified if he failed to make adequate gains. His response to the individualized reading intervention is provided in Figures 3 and 4. Figure 3 shows that Mark quickly responded to the word attack intervention. Data were collected once per week on the percentage of words read correctly from second-grade passages. Mark's response to the intervention contrasted dramatically with his performance reading unknown words prior to the intervention. By the sixth week, Mark correctly read 100% of words presented when prior to intervention he was only reading 55% to 60% accurately. Figure 4 shows that Mark improved in reading fluency as well. Prior to word attack intervention, the effects of the fluency intervention had leveled off. With the addition of the word attack intervention, Mark's fluency steadily improved until he met the second-grade goal. By the end of May, Mark met the PALS summed score benchmark. His end-of-the-year PALS (58 summer score) showed him meeting the benchmark, reading instructionally at second-grade level with comprehension, and reading at a rate of about 60 WCPM.

Step 5: Decision-Making Process to Determine Eligibility for Special Education Services

Despite falling below the second-grade benchmark in September, Mark demonstrated growth on accuracy, fluency, and decoding as a result of the efforts of school personnel. The team reviewed Mark's intervention data and determined that special education services were not necessary. However, Julie voiced concerns about Mark and the continued need for support:

> I could see that Mark had made great progress, but I knew that summer could potentially influence his starting point in the fall and that his progress was the result of substantive instruction *in addition* to the regular classroom. So I insisted that a meeting be scheduled for him in the fall to be proactive about his needs.

Mark's progress was significant relative to where his skills were at the beginning of the year. If the interventions had not met Mark's needs, the team would have been charged with determining whether the lack of response was indicative of a learning disability.

Why RTI?

As illustrated, RTI is a process that incorporates both assessment and intervention so that immediate benefits come to the student. Assessment data are used to inform interventions and determine the effectiveness of them. As a result of the intervention-focused nature of RTI, eligibility services shift toward a supportive rather than sorting function. A testing model that identifies and sorts students into programs or services is predicated upon the effectiveness of those services. Unfortunately, the effectiveness of special education, particularly placement of students in separate classrooms, has been variable at best (Bentum & Aaron, 2003; Kavale, 1990), even as an increasing percentage of students have been identified as learning disabled over the past 30 years (Gresham, 2002). Within the RTI model, instruction can at last be addressed.

Queries, Concerns, and Future Research

We have worked with state departments of education, school districts, schools, and teachers long enough to

Figure 3
Mark's Accuracy During Individualized Intervention

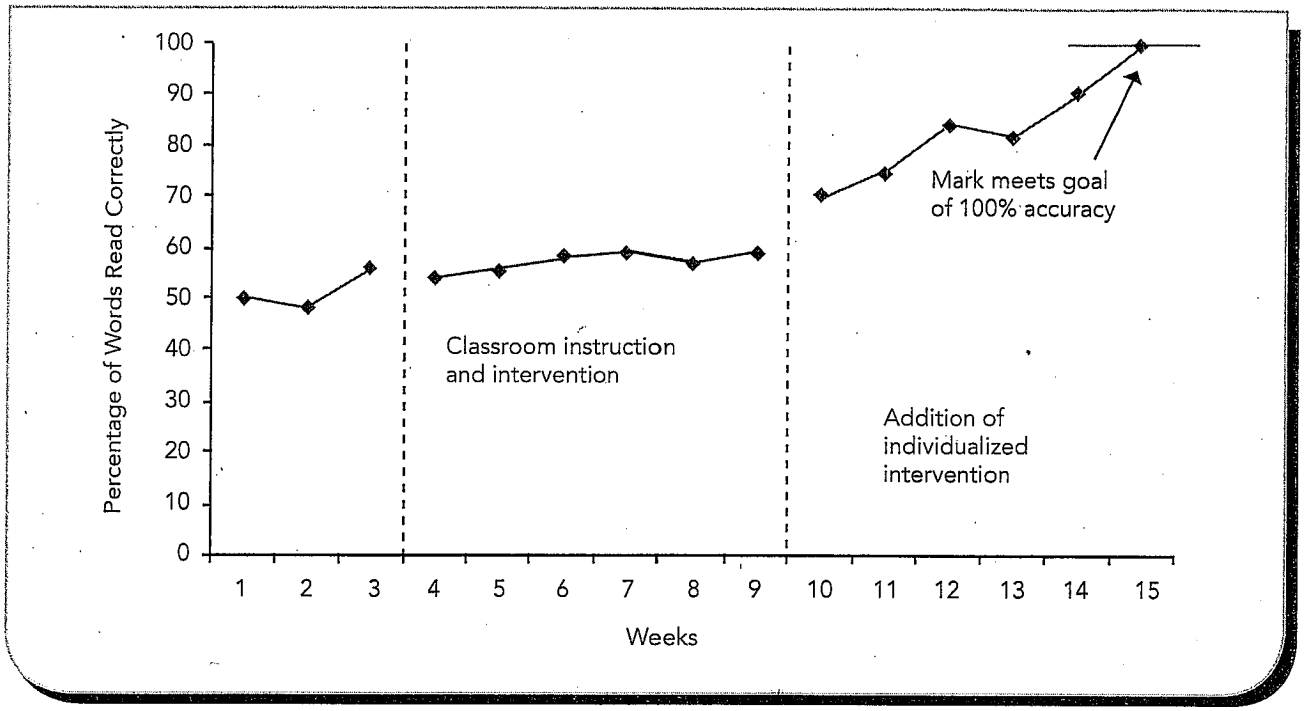
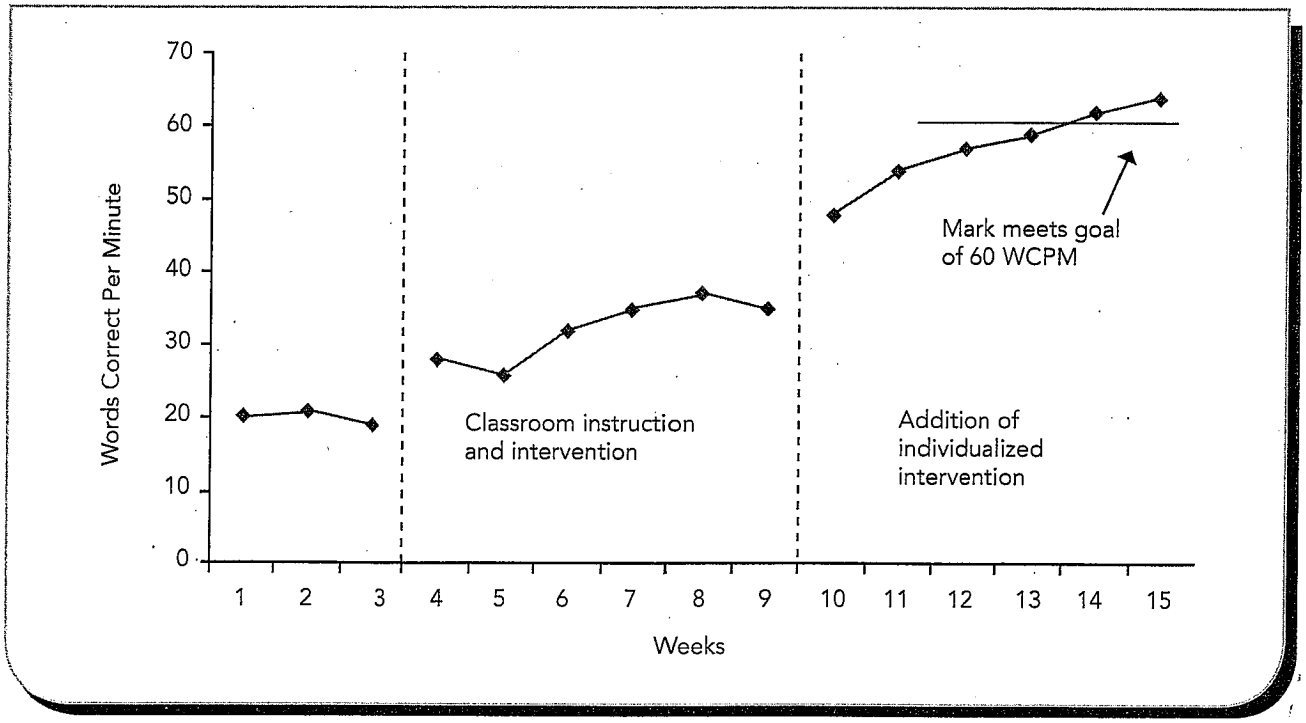


Figure 4
Mark's Fluency During Individualized Intervention



have questions about RTI. The first issue is that definitions of scientific research privilege experimental and quasi-experimental research (Eisenhart & Towne, 2003; Pressley, 2003). Experiments occur when subjects are randomly assigned to different conditions and the results measured, and they are the best way to know if a practice is causing a certain learning outcome. However, they depend on delivering an instructional treatment in a standardized way, often with study personnel. When teachers do participate in experiments, they often receive intensive support that may not be available when the strategy is widely implemented. The artifices of experiments can limit the degree to which the instructional treatment can be implemented in the real world (Pressley, 2003).

Second, if scientifically based interventions are to be implemented, then research findings must get to schools. We are concerned that the label *scientifically based* will be misused and will proliferate as publishers and companies slap it on everything they market to schools. The final issue is that diverse ways to screen in literacy are still emerging (Gersten & Dimino, 2006). Researchers note that phonologically based competencies, such as phoneme awareness, letter/sound knowledge, and decoding, contribute to part of what makes a student a successful reader (Gersten & Dimino, 2006; Paris, 2005; Scarborough, 2005). Readers must also have a deep knowledge of word meanings and be able to comprehend text. We know oral reading fluency is a good predictor of grade 1 comprehension (Riedel, 2007) but powerful, direct screenings in the areas of vocabulary and comprehension have yet to be developed for elementary learners. Nonetheless, intervening in these areas is important despite the fact that few screening tools exist.

Despite the challenges with RTI, we have seen this approach increase the quantity and quality of instruction for struggling readers. RTI is an initial attempt to provide an alternative to the dominant and damaging discrepancy model in which so much time is spent admiring the student's reading problem. By this we mean people discuss the problem, collect data on it, and write about it, months before they *do* anything about it. IDEA 2004 provides school districts with a choice to opt out of the discrepancy model.

References

Bell, M. (2007). *Reading teachers play key role in successful response to intervention approaches.* Retrieved May 31, 2007, from www.reading.org/downloads/resources/IDEA_RTI_teachers_role.pdf

Bentum, K.E., & Aaron, P.G. (2003). Does reading instruction in learning disability resource rooms really work?: A longitudinal study. *Reading Psychology, 24*(3–4), 361–382. doi:10.1080/02702710390227387

Cassidy, J., & Cassidy, D. (2008). What's hot, what's not for 2008? *Reading Today, 25*(4), 1, 10–11.

Clay, M.M. (1987). Learning to be learning disabled. *New Zealand Journal of Educational Studies, 22*(2), 155–173.

Deno, S.L., Mirkin, P.K., & Chiang, B. (1982). Identifying valid measures of reading. *Exceptional Children, 49*(1), 36–45.

Eisenhart, M., & Towne, L. (2003). Contestation and change in national policy on "scientifically based" education research. *Educational Researcher, 32*(7), 31–38. doi:10.3102/0013189X032007031

Flugum, K., & Reschly, D. (1994). Prereferral interventions: Quality indices and outcomes. *Journal of School Psychology, 32*(1), 1–14. doi:10.1016/0022-4405(94)90025-6

Francis, D.J., Fletcher, J.M., Stuebing, K.K., Lyon, G.R., Shaywitz, B.A., & Shaywitz, S.E. (2005). Psychometric approaches to the identification of LD: IQ and achievement scores are not sufficient. *Journal of Learning Disabilities, 38*(2), 98–108. doi:10.1177/00222194050380020101

Fuchs, D., Fuchs, L., & Bahr, M. (1990). Mainstream assistance teams: A scientific basis for the art of consultation. *Exceptional Children, 57*(2) 128–139.

Fuchs, D., Mock, D., Morgan, P.L., & Young, C.L. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities: Research & Practice, 18*(3), 157–171. doi:10.1111/1540-5826.00072

Fuchs, L.S., & Deno, S.L. (1981). *The relationship between curriculum-based mastery measures and standardized achievement tests in reading* (Research Report No. 57). Minneapolis: University of Minnesota Institute for Research on Learning Disabilities. (ERIC Document Reproduction Service No. ED212662)

Gersten, R., & Dimino, J.A. (2006). RTI (Response to Intervention): Rethinking special education for students with reading difficulties (again). *Reading Research Quarterly, 41*(1), 99–108. doi:10.1598/RRQ.41.1.5

Good, R., & Kaminski, R. (2002). *DIBELS oral reading fluency passages for first through third grades* (Technical Report 10). Eugene: University of Oregon.

Gresham, F. (2002). Responsiveness to intervention: An alternative approach to the identification of learning disabilities. In R. Bradley, L. Danielson, & D. Hallahan (Eds.), *Identification of learning disabilities: Research to practice* (pp. 467–519). Mahwah, NJ: Erlbaum.

Illinois State Board of Education. (2008). *Illinois Snapshots of Early Literacy.* Retrieved June 5, 2007, from www.isbe.state.il.us/curriculum/reading/html/isel.htm

International Reading Association. (2007). *Implications for reading teachers in Response to Intervention (RTI).* Retrieved May 31, 2007, from www.reading.org/downloads/resources/rti0707_implications.pdf

Invernizzi, M., Juel, C., Swank, L., & Meier, J. (2005). *Phonological awareness literacy screening.* Virginia: The Rector and The Board of Visitors of the University of Virginia.

Kavale, K. (1990). Effectiveness of special education. In T.B. Gutkin & C.R. Reynolds (Eds.), *Handbook of school psychology* (2nd ed., pp. 868–898). New York: Wiley.

Lyon, G.R. (1995). Research initiatives in learning disabilities: Contributions from scientists supported by the National

Institute of Child Health and Human Development. *Journal of Child Neurology, 10*(Suppl. 1), S120–S126.

Lyons, C., & Beaver, J. (1995). Reducing retention and learning disability placement through reading recovery: An educationally sound cost-effective choice. In R. Allington & S. Walmsley (Eds.), *No quick fix: Rethinking literacy programs in America's elementary schools* (pp. 116–136). New York: Teachers College Press.

National Center on Student Progress Monitoring. (2007). Common questions for progress monitoring. Retrieved May 20, 2007, from www.studentprogress.org/progresmon.asp#2

O'Connor, R.E., Fulmer, D., Harty, K.R., & Bell, K.M. (2005). Layers of reading intervention in kindergarten through third grade: Changes in teaching and student outcomes. *Journal of Learning Disabilities, 38*(5), 440–455. doi:10.1177/00222194050380050701

O'Malley, K., Francis, D.J., Foorman, B.R., Fletcher, J.M., & Swank, P.R. (2002). Growth in precursor and reading-related skills: Do low-achieving and IQ-discrepant readers develop differently? *Learning Disabilities Research & Practice, 17*(1), 19–34. doi:10.1111/1540-5826.00029

Paris, S.G. (2005). Reinterpreting the development of reading skills. *Reading Research Quarterly, 40*(2), 184–202. doi:10.1598/RRQ.40.2.3

Parker, R., Hasbrouck, J., & Tindal, G. (1992). Greater validity for oral reading fluency: Can miscues help? *The Journal of Special Education, 25*(4), 492–503.

Powell-Smith, K., & Ball, P. (2002). Best practices in reintegration and special education exit decisions. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology-IV* (pp. 541–557). Bethesda, MD: National Association of School Psychologists.

Pressley, M. (2003). A few things reading educators should know about instructional experiments. *The Reading Teacher, 57*(1), 64–71.

Riedel, B. (2007). The relation between DIBELS, reading comprehension, and vocabulary in urban first grade students. *Reading Research Quarterly, 42*(4), 546–567. doi:10.1598/RRQ.42.4.5

Scarborough, H. (2005). Developmental relationships between language and reading: Reconciling a beautiful hypothesis with some ugly facts. In H.W. Catts & A.G. Kamhi (Eds.), *The connections between language and reading disabilities* (pp. 3–24). Mahwah, NJ: Erlbaum.

Shinn, M. (1989). *Curriculum-based measurement: Assessing special children*. New York: Guilford.

Stanovich, K. (2005). The future of a mistake: Will discrepancy measurement continue to make the learning disabilities field a pseudoscience? *Learning Disability Quarterly, 28*(2), 103–106. doi:10.2307/1593604

Taylor-Greene, S., Brown, D., Nelson, L., Longton, J., Cohen, J., Swartz, J., et al. (1997). School-wide behavioral support: Starting the year off right. *Journal of Behavioral Education, 7*(1), 99–112. doi:10.1023/A:1022849722465

Texas Education Agency & University of Texas System. (2006). *Texas Primary Reading Inventory*. Retrieved from www.tpri.org/products/

University of Texas Center for Reading and Language Arts. (2003). *Three-tier reading model: Reducing reading difficulties for kindergarten through third grade students*. Austin, TX: Author.

U.S. Department of Education. (1977). *1977 code of federal regulations*. Washington, DC: Author.

U.S. Department of Education. (2006). *Assistance to states for the education of children with disabilities and preschools grants for children with disabilities, final rule*. Retrieved May 17, 2007, from eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/e9/95.pdf

Vaughn, S., & Fuchs, L.S. (2003). Redefining learning disabilities as inadequate response to instruction: The promise and potential problems. *Learning Disabilities Research & Practice, 18*(3), 137–146. doi:10.1111/1540-5826.00070

Vellutino, F.R., Scanlon, D.M., & Lyon, G.R. (2000). Differentiating between difficult-to-remediate and readily remediated poor readers: More evidence against the IQ-discrepancy definition of reading disability. *Journal of Learning Disabilities, 33*(3), 223–238. doi:10.1177/002221940003300302

Walmsley, S., & Allington, R. (2007). *No quick fix, the RTI edition: Rethinking literacy programs in America's elementary schools*. Newark, DE: International Reading Association.

Wanzek, J., & Vaughn, S. (2008). Response to varying amounts of time in reading intervention for students with low response to intervention. *Journal of Learning Disabilities, 41*(2), 126–142. doi:10.1177/0022219407313426

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