

# *The California School Psychologist*

*2005, Volume 10*

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## Comparison of Existing Response-to-Intervention Models to Identify and Answer Implementation Questions

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Response-to-intervention (RTI) is the front-running candidate to replace current practice in diagnosing learning disabilities, but researchers have identified several questions about implementation. Specific questions include: Are there validated intervention models? Are there adequately trained personnel? What leadership is needed? When does due process protection begin? and Is RTI a defensible endpoint in the identification process? These questions were addressed by examining four existing large-scale RTI models, Heartland Model (Iowa), Intervention-Based Assessment (Ohio), Instructional Support Teams (Pennsylvania), and the Problem-Solving Model in Minneapolis (Minnesota) Public Schools. The RTI process led to positive outcomes for children with and without disabilities, but all four models were phased-in over time, relied on extensive training for a multidisciplinary team, and followed a protocol to develop data-based adaptations. Clarification about team membership, leadership, and initiation of due process is still required. Additional questions about RTI were generated regarding students in secondary grades, parental involvement, and fidelity of implementing. Recommendations for implementation are included.

Key Words: RTI, Implementation, LD, Identification, Models

Why is there widespread consensus that the discrepancy model failed (Aaron, 1997; Fletcher et al., 1998)? Some argue that the discrepancy model is so inconsistently implemented that its validity in practice cannot be fully ascertained (Scruggs & Mastropieri, 2002). Others suggest that the discrepancy model is not the best assessment approach for learning disabilities (LD) and that superior models exist (Hale, Naglieri, Kaufman, & Kavale, 2004). Still others contend that the construct of LD is fundamentally flawed and will probably never be adequately conceptualized for differential identification purposes (Algozzine & Ysseldyke, 1982, 1983; Coles, 1998; Ysseldyke & Marston, 2000).

The discrepancy model was institutionalized in 1977 when it was used to operationalize LD in the initial federal regulations for the Education for All Handicapped Children Act (1975; renamed Individuals with Disabilities Education Act [IDEA] in 1990). Shortly thereafter, the Office of Special Education Programs (OSEP) in the U.S. Department of Education funded the Institute for Research on Learning Disabilities (IRLD) at the University of Minnesota to study LD diagnostic practices. Initial research from IRLD and other scholars quickly started to discredit the model, but the funding and subsequent research occurred after the model was enacted. Change in education is a slow and frustrating process (Ysseldyke, 2001); thus despite considerable criticism, the discrepancy model remained the prevailing LD diagnostic approach for approximately 30 years.

In August of 2001, OSEP conducted a two-day summit to discuss LD practice and future policy. Gresham (2001) presented a model that used a response-to-intervention (RTI) approach to diagnose LD in which children would be identified as LD only if problem behaviors did not significantly improve after implementing a validated intervention. Almost simultaneously, the President's Commission on Excellence in Special Education (PCESE, 2001) endorsed an RTI diagnostic approach for LD. RTI has since been endorsed by a number of professional associations, including the National Association of School Psychologists, and appears to be the most prominent alternative to the discrepancy model (Fuchs, Mock, Morgan, & Young, 2003).

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Using a lack of progress to determine special education eligibility is not a new concept (e.g., Fuchs & Fuchs, 1998; Vellutino et al., 1996), but a universally accepted operational definition of RTI is yet to be determined. However, some points of consensus seem to exist including use of a multi-tiered approach to intervention (Marston, 2003) and the critical importance of directly assessing academic skills (Burns, Dean, & Klar, 2004; Fuchs, 2003; Gresham, 2001). Generally speaking, RTI involves the following five steps: students participate in effective general education instruction provided by their classroom teacher, progress is monitored, those students who do not respond to the effective instruction are given additional or different remediation, progress is again monitored, and those students who are not responsive to the more intense intervention are either qualified or evaluated for special education (Fuchs et al., 2003).

The recent reauthorization of *IDEA* (2004) explicitly stated that districts need not use a discrepancy model to diagnose LD and allowed for assessing response to scientifically based interventions as a diagnostic tool. However, for RTI to avoid a similar fate as the discrepancy model, research is needed before RTI can be operationalized in federal and state regulations. Recently researchers have called attention to a number of unanswered questions about RTI and called for empirical investigation of these issues. Unanswered questions include: (a) To what criteria should a child's progress be compared to judge responsiveness (Fuchs, 2003)? (b) What leadership is needed to insure that the practice of RTI is properly implemented (Fuchs et al., 2003)? (c) Are parents ready for a noncategorical approach to LD diagnosis and service (Fuchs et al., 2003)? (d) Are there validated intervention models and adequately trained personnel (Vaughn & Fuchs, 2003)? (e) When does due process protection begin (Vaughn, & Fuchs, 2003)? and (f) Is RTI a defensible endpoint in the identification process (Vaughn & Fuchs, 2003)?

Some of the identified questions about RTI are already being studied (e.g., demarcating unresponsiveness was examined by Fuchs, 2003), and others involving attitudes and beliefs will be difficult to answer before implementation (e.g., parents' readiness for a noncategorical approach). However, some questions are relevant to implementation and need immediate inquiry. Fortunately, large-scale RTI models are already in place and may suggest answers to these implementation questions. Fuchs et al. (2003) identified four large-scale RTI models that are exemplars of wide-scale problem solving: the Heartland Agency Model in Iowa (Heartland, 2004; Ikeda, Tilly, Stumme, Volmer, & Allison, 1996), Ohio's Intervention-Based Assessment (Telzrow, McNamara, & Hollinger, 2000), Pennsylvania's Instructional Support Team (IST; Kovaleski, Tucker, & Stevens, 1996), and Minneapolis (Minnesota) Public Schools' Problem-Solving Model (PSM; Minneapolis Public Schools, 2001). All four models have been identified as examples of best practice for large-scale problem solving efforts (Barnett et al., 1999; Kovaleski, 2002; Marston & Magnusson, 1988; Tilly, 2002), and recent meta-analytic research found that the four models demonstrated large effects for improving student learning and systemic variables such as reducing the number of children referred to and placed into special education (Burns, Appleton, & Stehouwer, 2005).

In this paper we examine these four large-scale RTI models to address questions about RTI implementation. Specific questions investigated were: (a) Are there validated intervention models? (b) Are there adequately trained personnel? (c) What leadership is needed for success? (d) When does due process protection begin? and (e) Is RTI a defensible endpoint in the identification process? Consistencies between models suggested potential answers to these questions and inconsistencies suggested potential areas of research needed before effective RTI implementation could occur.

## LARGE-SCALE RTI MODELS

Below are brief descriptions of the four models identified by Fuchs et al. (2003). Comprehensive descriptions exceed the scope of the current paper and readers are referred to specific references about each model and to Fuchs et al.

The Heartland Area Educational Agency 11, one of 15 AEAs, in Iowa, implemented a problem-solving model in 1985 in which school personnel were taught to move through a four-level process in the identification and remediation of student difficulties (Ikeda & Gustafson, 2002). At levels I and II, educational professionals consult first with the child's parents (Level I) and then the building's assistance team (Level II). Unsuccessful efforts after Level II lead to the involvement of Heartland Agency personnel (usually as teams) in an extended problem-solving process (Level III) that emphasizes problem analysis within the confines of general education. Finally, students who are not successful at Level III are considered for special education eligibility (Level IV). The Heartland Agency is currently transitioning to a three-tiered model, but the reformed tiers are not yet fully developed (Tilly, 2003).

The IST model began in Pennsylvania in 1990 and was phased into elementary buildings within all of the state's 501 school districts over a five-year period (Kovaleski, Tucker, & Duffy, 1995). The model was implemented in an attempt to bridge special and general education programs by shifting the focus of special education from categorical services to effective instruction in general education (Kovaleski et al., 1996). The primary component of the IST model is the building instructional support teacher who is a specially trained teacher, without an assigned caseload, who works with classroom general education teachers to attain student goals (Kovaleski et al., 1995). This support is limited to 50 school days, after which the IST meets to discuss student progress and decide if a multidisciplinary evaluation is warranted. There are no formal phases or stages within IST, but three basic steps are followed (Pawlowski, 2001). First, an initial peer conference occurs between the referring teacher and a consulting member of the IST (e.g., school psychologist or school worker). Next, the teacher's concerns are behaviorally defined and a formal meeting of the IST is held. Finally the IST develops interventions that are collaboratively implemented by the classroom teacher and the support teacher. IST was described as "the best-known statewide pre-referral intervention program in the nation" (Fuchs et al., 2003, p. 162), and in addition to Pennsylvania, was implemented on much smaller scales in Connecticut, Michigan, New York, and Virginia.

Ohio's statewide Intervention-Based Assessment (IBA) project uses high-quality data, obtained by direct assessment in natural sessions, to design and evaluate interventions for referral problems (Barnett et al., 1999). Functional assessments and analyses are conducted by a multidisciplinary team (MDT) consisting of educational professionals and the child's parents (Telzrow et al., 2000) using conjoint behavioral consultation. As with IST, there are no specific phases in IBA, but unlike IST there are no mandated timelines. However, at any time the MDT could suspect a disability and would then conduct an evaluation to determine if instructional methods necessary for success qualify as specially designed instruction, the child's characteristics match the federal definition of one or more special education disabilities, and the condition would have an adverse effect on the child's education without special education and related services (McNamara & Hollinger, 2003). IBA emphasizes early intervention by focusing on elementary- and preschool-aged children (Barnett et al., 1999).

Minneapolis Public Schools embarked on a reform effort in 1993 that would change the role of both special and general education personnel (Marston, Muyskens, Lau, & Canter, 2003). The PSM uses formative data to focus instruction and purportedly accommodates students in general education

(Minneapolis Public Schools, 2001). There are three stages in the PSM that progress from teacher classroom interventions based on global screening data (Stage 1), to refined interventions and progress-monitoring strategies developed by a problem-solving team (Stage 2), and consideration of special education referral in Stage 3 (Marston et al., 2003).

## RESEARCH QUESTIONS

### **Do we have validated intervention models and measures to assure instruction validity?**

Vaughn and Fuchs (2003) raised the first question about RTI: Do empirically validated intervention and response strategies exist? As shown in Table 1, all four models use data-based decision making and frequent monitoring of progress. Heartland, IBA, and PSM use curriculum-based measurement (CBM) to measure student response to intervention, a measurement methodology described by Gresham (2001) as an essential component of RTI. IST uses curriculum-based assessment (CBA; Gravois & Gickling, 2002) to provide data useful for designing instructional adaptations within RTI as recommended by Burns et al. (2004). A comparison of these two assessment models would exceed the scope of the current article. Therefore, readers are encouraged to see comparisons of CBA and CBM in the literature (e.g., Burns, 2004; Burns, MacQuarrie, & Campbell, 1999; Shinn, Rosenfield, & Knutson, 1989) for additional information on how they compare and differ.

The current review did not find mention of specific instructional methodologies, but instead revealed a protocol that emphasized formative assessment, frequent progress monitoring, and informal assessments relevant to the curriculum (CBA and CBM). Research supported the instructional effectiveness of using CBM (Fuchs & Fuchs, 1986) and CBA (Burns, 2002; Shapiro, 1992; Shapiro & Ager, 1992) for various academic subjects, and the reliability and validity of both have been empirically supported (Burns 2004; Marston, 1989). In addition, using both CBA and CBM together provide an especially useful and effective assessment-to-intervention model (Burns, 2002; Shapiro, 2004).

### **Are there adequately trained personnel to implement an RTI model?**

Implementing RTI on a national level would require a “very large number of appropriately trained personnel” (Vaughn & Fuchs, 2003, p. 144). This statement is both accurate and probably understated because for many, RTI represents a new paradigm (Reschly & Ysseldyke, 2002). Training appeared to be an important implementation component for all four models because each was implemented in phases that involved broad training, including general education teachers, and preparation of specific professionals. Phased-in implementation and training lasted four years in Ohio for 329 schools (Telzrow et al., 2000), five years in Pennsylvania’s 501 school districts (Kovaleski et al., 1995), and almost 10 years in Minneapolis’s approximately 100 school buildings (Marston et al., 2003).

Perhaps the point most consistently emphasized among the four models was use of a multidisciplinary collaborative team, but there was not a consensus as to what professionals should make up that team. The general education teacher was the only consistently mandated member of the team, and other team members included the special education teacher (IBA), school psychologist (IBA), instructional support teacher (IST), school counselor (Heartland, 2004), and principal (IBA and IST). Phase III of the Heartland model involves Heartland staff, which are usually school psychologists and masters-level special educators trained in behavioral problem solving (Fuchs et al., 2003). The PSM is unique in that each school can determine team membership based on school structure and needs of its students (Lau et al., 2005).

**Table 1.**  
**Five RTI Implementation Questions and How Each is Addressed by the Four Large Scale RTI Models**

Question	Heartland Agency (Iowa)	Intervention-Based Assessment (Ohio)	Instructional Support Team (Pennsylvania)	Minneapolis Public Schools Problem-Solving Model
Validated Intervention Model?	Data-based instructional decision making with frequent monitoring of progress.	Data-based problem solving through functional analysis and measurement in both baseline and throughout intervention.	Uses curriculum-based assessment to assess and adapt instruction, and to monitor progress.	Data-based instructional decision making with frequent monitoring of progress and evaluation of instruction.
Adequately Trained Personnel?	Total staff development. Requires collaboration within a multidisciplinary team.	State-wide training. Requires collaboration within a multidisciplinary team.	Specialized training. Requires collaboration within a multidisciplinary team.	Schoolwide and targeted training. Requires collaboration within a multidisciplinary team.
Necessary Leadership?	Required team members are general education teachers and counselors, and Heartland staff at Level III. Site-based management.	Required team members are principal, special education teacher, general education teacher, and school psychologist. Local control.	Required team members are principal, general education teacher, instructional support teacher, and others as needed. Principal is instructional leader.	Each school determines PSM team membership based on needs of students and school structure. Principal is instructional leader.
When should due process begin?	Four levels with fourth being consideration for special education.	Ongoing problem-solving until problem is solved or disability is suspected.	After 50 school days without adequate progress.	Three stages with the third being consideration for special education. Continuous teach-test-teach-test cycle.
Defensible Endpoint?	Fewer new special education placements, increased academic skills and number of passing scores on state proficiency test, and more intensive special education.	Fewer special education referrals and new placements.	Increased student time on task, task completion, and task comprehension, reduced special education referrals and placements, fewer grade retentions, and cost savings.	Fewer new special education placements, increased student academic skills and adaptive behavior, increased special education services, and earlier intervention.

### What leadership will make RTI successful?

Fuchs et al. (2003) inquired about necessary leadership to make RTI successful. The Heartland model and IBA both emphasize local autonomy, but only IBA and IST require principal involvement and principal participation varies in Heartland (Ikeda & Gustafson, 2002). The PSM does not outline a clear administrative role except to say that principals should be the instructional leader who models PSM procedures and decision-making (Lau et al., 2005).

Leadership remains a question in need of additional research with several questions yet to be answered. For example, given that RTI is a convergence of general and special education, would district-level leadership come from special education (e.g., director of special education), general education (e.g., director of curriculum and instruction), or would this dichotomy become irrelevant? What role would building principals have and would they be given autonomy in administering RTI within their buildings? To which state-level department would RTI activities and results be reported? These are questions with important implications for implementation and need to be addressed before RTI can be put into practice on a national level.

Recently the University of Minnesota's Center for Reading Research conducted a "Consortium for Responsible School Change in Literacy," involving researchers from six universities and two major professional organizations, focused on leadership and instructional research. Members of the Consortium met for two days in November 2004 to share their research findings and identify the common requirements for successful school improvement in literacy. Table 2 is a list of two of the categories of findings as outlined by Taylor (2005). While the focus of the list is on literacy, it applies across multiple subject areas and suggests that leadership is needed at both the individual teacher and systemic level. Implementation of RTI models will likely require far more than tweaking existing assessment practices. It will require fundamental system change that, in turn, will require significant leadership. The need for leadership is not restricted to initial implementation of RTI, but is perhaps more important for sustaining RTI practices.

**Table 2.**  
**Leadership Components Necessary for Change**

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#### Support for Organizational Change

1. *Vision and Commitment.* Members of a school community must develop a shared vision and establish a long-term commitment to literacy improvement.
2. *Buy-In and Leadership.* A structure or model for a school improvement is essential, and most staff within a school must consciously select a particular school improvement model for it to be successfully implemented. Once a school has commitment, strong leadership is needed to keep the reform effort moving forward with success.
3. *Data-Driven Reform.* Use of data at the student, teacher, and school level is needed to promote change.
4. *Collaborative School Community.* To be successful with a school improvement effort, teachers and administrators must become a collaborative school community.

#### Support for Individual Change

1. *Professional Learning.* It is essential that teachers have the opportunity to engage in ongoing, focused, challenging, job-embedded professional learning.
  2. *Change in Teaching.* Teachers' professional learning must focus on reflection and change in thinking and in teaching.
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### **When should due process begin?**

Federal and state mandates limit the length of time between parental referral and completion of an evaluation plan. However, involvement in these RTI models is generally not limited to any time frame and only IST has a time limit (50 school days of instructional support teacher involvement). PSM involves a “continuous test-teach-test-teach model” (Marston et al., 2003) that generally requires four to six weeks for Stage 1 and six to eight weeks for Stage 2 (Lau et al., 2005), but student response dictates least restrictive environment decisions and necessary timelines (Marston et al., 2003). Moreover, PSM and Heartland use non-categorical descriptors for special education disabilities (e.g., Student Needing Alternative Programming in PSM). IBA and IST are pre-referral models in which traditional eligibility assessments could occur, but data from the RTI process are considered in the evaluation. A traditional evaluation for special education could occur within all of the four models, but the evaluation is unlikely to include norm-referenced psychoeducational measures (e.g., IQ test) in Heartland or MPS (Reschly, 2003).

Clearly, due process protections would occur for children in Heartland’s Level IV and PSM’s Stage 3, but what if the levels or stages that precede the special education consideration exceed state mandates? Perhaps some due process consideration is needed earlier if the RTI model does not have mandated timelines. Alternatively, placing a timeline on the process might alleviate this issue to a degree; the effect of which would have to be researched.

### **Is inadequate response to instruction a defensible endpoint?**

In order for RTI to be a defensible endpoint in the identification process the deficit responsible for the lack of responsiveness should be best described as LD and the program should be of sufficient value to warrant classification (Vaughn & Fuchs, 2003). As stated earlier, two of the programs used different terms besides LD, thus the best name for the deficit causing unresponsiveness is not obvious. The second point simply restated could be that positive student outcomes are needed for children classified as both responsive and unresponsive.

Fuchs et al. (2003) contended that there was “insufficient evidence of the effectiveness” (p. 166) for the four extant RTI approaches. However, data exist for each of these approaches and collectively support the effectiveness of the large-scale RTI models (Burns et al., 2005). Researchers found that RTI reduced referrals to and/or placements in special education (Kovaleski et al., 1995; Marston et al., 2003; McNamara, 1998; McNamara & Hollinger, 1998; Reschly & Starkweather, 1997; Rock & Zigmond, 2001; Sornson, Frost, & Burns, 2005; Tilly 2003), but the total number of students assisted through pre-referral and special education remained relatively stable (Kovaleski et al., 1995; Marston et al., 2003). This suggests that children are receiving sufficient support without being diagnosed with a disability. Schools that implemented Heartland or IST also saw more children demonstrating proficient skill levels on state accountability tests (Heartland, 2004; Sornson et al., 2005) and IST led to reduced numbers of student grade retentions (Kovaleski et al., 1995). Moreover, student participation in RTI led to increased student skills such as improved reading (Marston et al., 2003; Tilly 2003), improved adaptive behavior (Reschly & Starkweather, 1997), and increased time on task, task comprehension, and task completion (Kovaleski, Glickling, & Morrow, 1999).

Research suggested that children who successfully progressed through RTI (responsive to intervention) experienced positive outcomes, but these data are also necessary for those demarcated as unresponsive. The aforementioned schoolwide variables such as improved performance on state accountability tests and reduced grade retentions included both children who were responsive and those who were determined eligible for special education. In addition, participants in the Kovaleski et al.

(1999) study were 492 students referred to IST regardless of whether they were sufficiently responsive. Thus, these data also suggested that children identified as unresponsive and subsequently referred to or placed in special education also experienced positive outcomes such as increased academic skills. Moreover, special education within these four RTI models experienced increased services offered within special education, became more intense (Ikeda & Gustafson, 2002; Reschly & Starkweather, 1997), happened at earlier grades (Reschly & Starkweather, 1997), was more cost effective (Sornson et al., 2005), and directly linked resources with student needs (Tilly, 2003). Therefore, students diagnosed with a disability due to unresponsiveness also experienced positive outcomes, which suggested sufficient value to warrant the classification as unresponsive.

Given that RTI models resulted in fewer referrals to, and placements in, special education, school psychologists may be concerned about districts needing fewer psychologists. This was not the case in Minneapolis Public Schools. Despite decreased student enrollment the number of school psychologists employed in these schools almost doubled after PSM implementation (Lau et al., 2005). However, the school psychologist's role was markedly different than that found in traditional special education models (Lau et al., 2005; Marston et al. 2003). Compared to national averages, these psychologists spent less time engaged in assessment activities, and more time in direct intervention and consultation. Moreover, these school psychologists reported higher job satisfaction than suggested by national surveys (Reschly, 2003).

### **ADDITIONAL QUESTIONS**

Consistencies between the extant RTI models suggested answers to important implementation questions, but inconsistencies between them suggested additional questions. For example, the Heartland model is implemented in both elementary and secondary schools (Ikeda & Gustafson, 2002) and PSM is currently expanding into secondary grades (Marston et al., 2003), but IBA and IST are limited to elementary schools (Barnett et al., 1999; Kovaleski et al, 1995). Therefore, it is unclear how RTI would affect the lives of students attending high school and what implementation procedures are needed at the secondary level.

As stated earlier, IBA and Heartland require parental participation, but IST only suggests that teams attempt to include parents (Kovaleski et al., 1995) and PSM only requires parental notification (Lau et al., 2005). Longitudinal research found positive and direct links between academic achievement and parental involvement (Englund, Luckner, Whaley, & Egeland, 2004), but what that entails within RTI is yet to be determined.

Regardless of program model, RTI implementation fidelity is critical to intervention success. For example, students in schools that implemented IST with a higher level of fidelity experienced higher task completion, task comprehension, and time on task (Kovaleski et al., 1999). Fortunately, research has suggested that IBA can be implemented with consistency (Telzrow et al., 2000). Adequate implementation appeared to be a key obstacle to overcome for most prereferral models (Burns, Vanderwood, & Ruby, 2005), which could negatively affect student outcomes (Burns & Symington, 2002). However, none of the models included published procedures to assure implementation fidelity and as of yet, how fidelity of RTI implementation would be assessed in practice remains an unanswered question.

In addition to fidelity within the problem-solving model, the assessment of response to intervention requires that validated interventions occur with sufficient fidelity. In recent investigations, CBM systems were implemented to provide teachers with data needed to monitor student response to instruction and to make instructional adaptations (Ysseldyke, Bolt & Patterson, 2005; Ysseldyke, Thill,

Pohl, & Bolt, 2005). A comparison between experimental and control groups suggested that there was no treatment effect. Subsequently, it was learned that teachers in both studies had not implemented the instruction with a large percentage of students in the experimental group. Elimination of those students from the analysis produced an opposite effect and, in fact, the treatments in both studies were actually effective. Thus, it is critical to always ascertain the extent to which treatments were implemented, and whether they were implemented as intended.

### RECOMMENDATIONS FOR RTI IMPLEMENTATION

Large-scale RTI models resulted in positive student and systemic outcomes for children (Burns et al., 2005), but meta-analytic research on traditional special education models found negligible to small effects (Kavale & Forness, 1999). Therefore, identifying children as unresponsive within an RTI model appears to be a defensible endpoint in the identification process and positive outcomes warrant a move toward this approach, but only if professionals adhere to lessons learned from previous diagnostic models. Perhaps most important is the need for phased-in implementation and extensive training of both specialized and schoolwide personnel. Moreover, a multidisciplinary team should frequently measure the target skill/behavior in baseline and intervention phases, assess the match between student skill and curricular materials, and make data-based instructional adaptations. However, clarification about team membership, leadership, and initiation of due process is still required.

Standards for training and practice in school psychology call for data-driven decision making and accountability decisions (Ysseldyke et al., 1997). Suggestions outlined in this paper would require daily data-driven instructional decision making, but accountability is also needed regarding these changes in practice. Thus, it is imperative that school psychologists join with other educational professionals in documenting the extent to which RTI is effective in improving outcomes for students, including students with disabilities and limited English proficiency.

Answers are available to important questions and some remain unresolved. The unanswered questions represent potential obstacles to successful RTI implementation and should be researched before RTI is operationalized in regulations. Positive outcomes for children were found, but only after extensive training and careful implementation. Hopefully, that approach will be followed on the national model and will be phased in over time after sufficient research; Iowa, Minnesota, Ohio, and Pennsylvania may be good places to start.

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