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Toward More Effective Tiered Systems: Lessons From National Implementation Efforts

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Abstract

Based on the 2015 evaluation of response-to-intervention (RTI) efforts and our own 2 decades of experience in supporting educators' implementation of RTI efforts, four recommendations are presented to advance effective implementation of tiered systems of intervention. We suggest that by (a) assessing readiness and capacity, (b) providing content and coaching as part of professional development, (c) using evaluation data, and (d) including students with disabilities, educators can make strides to implement RTI more effectively and help to meet the needs of all students in today's schools.

In the early 2000s, the U.S. Department of Education (ED)'s Office of Special Education Programs (OSEP) convened a summit of stakeholders to discuss methods for identifying learning disabilities (LD), including a new concept called *response to intervention* (RTI). The recommendation for this summit occurred in response to well documented concerns surrounding the psychometric properties of assessments traditionally used to identify students with LD, increases in the numbers of students identified with LD, disproportionate representation among subgroups of minority students, and the variable and often poor quality of special education services (Bradley, Danielson, & Hallahan, 2002; Zumeta, Zirkel, & Danielson, 2014). RTI was discussed as a promising alternative to traditional identification procedures because of its focus on providing increasingly intensive, research-based instruction to students based on demonstrated response or nonresponse. Nonresponse, as measured by progress monitoring data, would be considered an indicator of potential LD (Vaughn & Fuchs, 2003).

Following the OSEP summit, the concept of RTI was formally introduced to the public with its inclusion in the 2004 reauthorization of the Individuals With Disabilities Education Act (IDEA) as an alternative method for identifying LD. Since that time, increasing numbers of educational decision makers have worked to implement RTI and other related frameworks (e.g., multitiered systems of support), primarily as a mechanism to identify students with LD more accurately, to distinguish them from those at risk for academic failure, and to support their needs through highly structured tiers of increasingly intensive intervention (Vaughn & Fletcher, 2012). (For the purposes of this article, we refer to all multitiered intervention frameworks using the term RTI.) Recent policy reviews indicate that 45 or more state education agencies (SEAs) recommend using RTI in schools and districts (Hauerwas, Brown, & Scott, 2013; Hudson & McKenzie, 2016).

A compelling body of controlled research on RTI has shown an increased likelihood of

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achieving improved outcomes for students with significant academic and behavior needs (Fuchs, Fuchs, & Compton, 2012; Shapiro, 2015; Vaughn & Swanson, 2015). Yet, at the same time, recent findings from evaluations of RTI in practice have provided evidence to suggest that implementation of the framework in authentic school contexts is a serious problem; it is not happening as intended or with any measure of fidelity (Balu et al., 2015; Shinn & Brown, 2016). This problem becomes seemingly more serious as findings from aforementioned policy reviews (Hauerwas et al., 2013; Hudson & McKenzie, 2016) reveal that of the SEAs recommending the use of RTI, fewer than 10% provide guidelines for its implementation.

Evaluations of RTI have suggested problems consistent with this lack of guidance surrounding implementation of the practice (Balu et al., 2015). In this article, we offer four actionable steps implementers can take to further the efficacy of their implementation and help RTI meet its promise. These recommendations are born out of decades of research experience and from our involvement in managing and directing the implementation efforts of many national technical assistance (TA) centers (Table 1). At the foundation of these recommendations is the knowledge that although teaching educators about RTI is important, it is simply not enough. We argue that the cumulative effect of increasing practitioners' focus on implementation, when paired with assessments of readiness, intentional professional development activities, job-embedded coaching, opportunities to practice, and summative and formative evaluation efforts, can help enhance the likelihood that RTI can be successful.

Measuring Impact Requires Faithful Implementation

In Balu et al.'s (2015) recent national evaluation of RTI, the authors found a lack of positive effects for student achievement for those receiving Tier 2 interventions who performed close to their school's screening cut point. In addition, and perhaps more important, the authors reported several issues surrounding how schools interpret and implement RTI. For example, 45% of schools reported providing Tier 2 supports at Grade 1 to students performing above the screening cut point, in other words, students who did not meet predetermined criteria for Tier 2 services. In addition, 67% of schools reported that students were removed from core instruction to access Tier 2 intervention rather than receive it as a supplemental service. The authors were unable to report on which specific Tier 2 protocols were used or whether staff had been trained on how to use it, and Tier 3 implementation was not evaluated. These issues surrounding implementation could account for the lack of positive impact on student achievement.

Lessons learned from the work of many of the federal- and state-funded TA centers charged with supporting schools, districts, and states with adoption and scaling of initiatives like RTI have noted similar trends in implementation (e.g., National Center on Student Progress Monitoring, National Center on

Table 1. Technical Assistance Centers Focused on Supporting Implementation of RTI.

Technical assistance center	Funding period	Description
National Center on Student Progress Monitoring	(2003–2009)	Provided technical assistance to states and districts on Grades K–5 progress monitoring practices
National Center on Response to Intervention	(2007–2012)	Provided technical assistance and dissemination to build state capacity to assist districts in implementing and evaluating models for RTI
National Center on Intensive Intervention	(2011–2021)	Provides technical assistance and dissemination focused on increasing state, district, and school capacity to support implementation of data-based individualization

Note. RTI = response to intervention.

Response to Intervention [NCRTI], National Center on Intensive Intervention [NCII]; see Table 1). In a recent summary of their progress, schools and districts that partnered with NCII demonstrated implementation challenges particularly with their ability to monitor fidelity of assessment and intervention procedures, evaluate their own processes, and consistently apply decision rules for adapting intervention as part of RTI (Gandhi, Marx, Kuchle, Lemons, & Wehby, 2016). It is reasonable to assume that without careful attention to the implementation of these crucial components of RTI, the likelihood of realizing improved student outcomes would be less.

One cannot truly measure the impact of RTI without first ensuring adequate implementation.

When considered in light of these implementation problems, it is perhaps not surprising that the Balu et al. (2015) evaluation found disappointing evidence of impact. In fact, with such poor implementation, some might even question the extent to which RTI was truly evaluated. These important findings suggest a pervasive and persistent misunderstanding of RTI in the field and underscore the need for comprehensive support that occurs over time if we are to expect the kind of high-quality implementation that is likely to yield student success.

Recommendations for Implementation

We offer the following recommended action items and related steps to help improve the quality of RTI implementation: (a) assess readiness and capacity, (b) combine coaching with efforts to develop content knowledge, (c) conduct and learn from ongoing evaluation, and (d) ensure access for students with disabilities. We recognize that realizing the level of change necessary for successful implementation of a systemic framework like RTI is a significant undertaking. Because of their multifaceted, diverse nature and the intense pressure to deliver extraordinary outcomes in the face of budget limitations, restricted resources, conflicting stakeholder priorities, and constant bureaucratic barriers (Education Pioneers, 2014), organizations like districts and schools present a particularly unique challenge for those tasked with implementation.

Complexity aside, the research on implementation is clear: *How* implementation occurs matters just as much as *what* is being implemented (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). Focusing on the "how," unfortunately, is often easier said than done. Despite the compelling research on its importance, practitioners are rarely taught what constitutes effective implementation or how to go about engaging in it with respect to RTI (Cook & Odom, 2013), and the field is plagued with "striking variations" in how RTI is defined and implemented (Hauerwas et al., 2013, p. 102). Insufficient practitioner knowledge and experience, partnered with the pressures to improve outcomes for students with disabilities, often leave schools and districts facing a complicated predicament: They must learn the essentials of successful implementation while simultaneously engaging in the work. This predicament leads us to propose that one cannot truly measure the impact of RTI without first ensuring adequate implementation, and it provides the basis for the recommended implementation action items that follow.

Action Item 1: Assess Readiness and Capacity

Implementation of RTI commonly requires educational entities to make comprehensive systems change (NCII, 2013); it often necessitates schoolwide instructional adaptations, systematic data analysis, and individualized student-level decision making at levels that task the bandwidth of resources, staffing, and budgets of many schools. It is therefore important to realize that not all sites are ready to implement RTI. Those with a wealth of intractable district policies (e.g., restrictions on creative scheduling, lack of data collection, limited inclusion of students with disabilities) may not be ideal candidates to begin systemwide implementation. In those cases, it is

important to use readiness data to prioritize areas in which to focus implementation efforts and then slowly use the momentum from those efforts to build toward full implementation.

Step 1: Recognize and address the crucial components of readiness. Buy-in, commitment, and perception are crucial components of readiness and key elements to the success of implementation (Fixsen et al., 2005; Pool, Johnson, & Carter 2010). Recognizing the context of how these elements affect implementation requires thoughtful action during the readiness phase and includes taking into consideration the relevant characteristics, settings, processes, and people responsible for implementing the innovation (Consolidated Framework for Implementation Research [CFIR], 2014). In the case of RTI, it is important to consider many variables, including, but not limited to,the treatment acceptability, strength, quality, and validity (i.e., What does the research say? How will this help my students?); adaptability (i.e., How can this be tailored to fit my school?); level of priority (i.e., How important is this to those implementing?); and knowledge, beliefs, and self-efficacy (i.e., Do individuals believe they know what to implement? What are their attitudes about their capacity to engage in the work?). Practitioners and educational decision makers will need to systemically focus on these crucial aspects of readiness. Without them, implementation efforts are less likely to help schools reach and sustain their goals (Wandersman et al., 2008).

Step 2: Use readiness data to inform implementation supports. Assessing readiness for implementation of RTI begins with gathering data from several sources and stakeholders across multiple time points (i.e., needs assessments, observations, interviews). Ideally, these data would include interviews with teams of stakeholders who (a) demonstrate knowledge of existing contexts for tiered interventions; (b) represent multiple perspectives, including leadership, general education, and special education; (c) have the authority and power to leverage resources and make decisions; and (d) are directly involved in the implementation efforts. One way to assess readiness is by using the rubrics and tools offered by the NCII (Table 2). We recommend that customized interview protocols, observation protocols,

Table 2. Resources for Implementation.

Resource	Purpose
National Center on Response to Intervention (NCRTI) Implementer Series http://www.rti4success.org/resources/rti-implementer-series	Provides foundational knowledge about essential components and implementation of RTI
NCRTI Implementation Integrity Rubric http://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet	Supports monitoring of school-level fidelity of RTI implementation and can also be used as self-assessment
National Center on Intensive Intervention (NCII) Data-Based Individualization (DBI) Training Series http://www.intensiveintervention.org/content/dbi-training-series	Provides an overview of the DBI process and in-depth discussion on each crucial component
NCII Fidelity Resources http://www.intensiveintervention.org/fidelity-resources	Includes tools and resources related to monitoring the fidelity of implementation of intensive intervention
NCII Implementation Interview http://www.intensiveintervention.org/resource/dbi-implementation-rubric-and-interview	Supports the monitoring of school-level implementation of DBI and also can be used as a self-assessment

Note. RTI = response to intervention.

and accompanying rubrics, like those developed by the NCRTI (see Table 2) and NCII, be used to organize and structure a site-based readiness assessment and can provide valuable data for implementers. Systemizing the data collection using a protocol and rubric may help ensure that all tangible indicators of readiness and commitment to implement an intervention are identified (CFIR, 2014).

It is not uncommon for educators to receive a single training on a policy or practice and then be expected to implement on their own.

Analysis of readiness assessments should focus on triangulating data to generate a global understanding of contextual factors that have the potential to support or impede implementation. After data analysis is complete, subsequent efforts should use findings to prioritize professional development needs. The analysis of readiness data should highlight both internal (e.g., staff skills and knowledge, availability of intervention resources, flexibility of scheduling) and external factors (e.g., state or district policies, student demographics, stakeholder priorities) that have the potential to impact implementation. Knowing how to effectively recognize and leverage contextual factors can support or impede change (Rogers, 2003). After initial readiness is determined, it is essential to ascertain specific areas of need so that implementation and support opportunities can be designed to address them.

Action Item 2: Combine Coaching With Developing Content Knowledge

Recent estimates suggest that urban districts spend upwards of $18,000 per teacher per year on professional development activities (The New Teacher Project [TNTP], 2015), often with little evidence of impact. TNTP (2015) also found that professional development opportunities were not sufficiently comprehensive and often failed to align with teachers' instructional needs. Given schools' limited resources, it is essential that such funds be used in a manner that is likely to yield impact. Providing minimal support for implementing a complex system, such as RTI, is likely to result in little if any behavior change. In fact, it is probably not worth doing. For implementation of a systemic change to have hope of taking root, those taking it on must both commit to the process and have access to ongoing implementation support that provides opportunities to learn crucial information and to apply and receive feedback on what they have learned.

Fixsen et al.'s (2005) stages of implementation provide a useful framework for helping systems organize to maximize the likelihood of successful implementation of a complex systemic change, such as RTI. Within the first phase—information gathering—stakeholders determine readiness, identify needs, and work to understand if and how a systemic change may help achieve their goals. In all too many cases, however, gathering initial information serves as a substitute for comprehensive implementation support (Wei, Darling-Hammond, & Adamson, 2010). It is not uncommon for educators to receive a single training on a policy or practice and then be expected to implement on their own. Although a 1-day training may expose people to how a potential product, system, or process may be useful for their context, it is unlikely to lead to the kind of behavior change necessary for implementation of something as complex as RTI to occur.

Step 1: Prioritize coaching. Professional development cannot occur in isolation; to lead to increased implementation, professional development must combine efforts to increase practitioner content knowledge and skills with ongoing coaching (Cornett & Knight, 2009). Ongoing coaching is essential for achieving practice change (Blase, 2009) and involves demonstration of skills, followed by practice opportunities and feedback to recipients (Fixsen et al., 2005).

It is often not until teams take what they have gathered from readiness assessments and consider how this can be applied to their practice that they begin to learn, in depth, about components of the framework, develop plans, put their plans into action, and work toward refining and improving their practices. In the case of RTI, the components include screening,

progress monitoring, intervention supports, and procedures for structured data review, among others. In addition, teams plan for how they will implement the practices. Recognizing how components of RTI work as an iterative process, and successfully integrating them into existing contexts, requires a significant level of behavioral change and support. Research has indicated that implementing practices that lead to behavioral change in educational practitioners is challenging; however, training that includes a coaching component has resulted in large increases in the percentage of participants demonstrating new skills and knowledge (Joyce & Showers, 2002; Reinke, Stormont, Herman, & Newcomer, 2014).

Step 2: Plan for repetition. After planning for implementation, teams enter an initial implementation phase and begin to put their plans into action. It is common for schools to run into obstacles during this phase, even when careful preparation has occurred. Often in this phase, people may realize they do not fully understand important concepts related to the RTI framework (e.g., Why should I graph data? What is a realistic goal? How do I implement this intervention?). As a result, implementation may stall without support for addressing these barriers. With respect to RTI, ensuring understanding key concepts may require additional professional development, continued coaching with feedback, or changes to meeting and data review procedures, among others.

School teams may master data collection, graphing, and how to determine whether students require intervention, but they often struggle with how to use the data at an individual student level.

As implementation teams learn new concepts, they need to hear information repeatedly and in multiple ways to act upon it. Schools, districts, and educational decision makers may plan to include traditional professional development workshops or webinars as part of this process and should always support this learning with job-embedded coaching. Coaching and repetition allow implementers to practice applying a new skill, receive feedback, and troubleshoot problems when they occur. It is not enough to simply mandate implementation or provide information, such as "Progress monitoring is a valid and reliable way to monitor student growth. Here are studies that show this is true." Rather, implementers need to understand how progress monitoring can help them accomplish their goals. They also need support in delivering and scoring assessments and repeated opportunities to practice reviewing and interpreting the data and a school schedule that provides time for data collection, review, and interpretation and that has the flexibility to allow changes to occur when they are needed.

We have observed this need for repetition of fundamental RTI implementation concepts in our experience operating national TA centers. Across multiple centers, our staff have worked with stakeholders to build their understanding of the purpose of different types of assessment, how data may be used to evaluate student progress and design appropriate interventions, and how to differentiate Tier 2 and Tier 3 interventions so that they constitute substantively different levels of service. In doing this work, we have found that these concepts in particular require frequent repetition and opportunities for practice. For example, school teams may master data collection, graphing, and how to determine whether students require intervention, but they often struggle with how to use the data at an individual student level to design more intensive interventions when needed. Teams may understand that Tier 3 or intensive intervention should be something more than what students receive at Tier 2, but they can be uncertain how to operationalize what it should look like or how and when to apply intervention changes for students. In these cases, ongoing support, including procedures for developing and evaluating progress, are essential for helping intervention teams put appropriate processes in place that are likely to yield results for students.

Action Item 3: Conduct and Learn From Evaluation

Evaluation is an important component of any systemic change effort because it can enable implementation teams to determine whether an innovation is achieving the desired effect. At the same time, when such an evaluation considers only distal outcomes, it has the potential to yield misleading conclusions. Thus, it also is crucial to measure and formatively evaluate implementation. That is, if impact does not occur, is it because the innovation did not "work" or because it was not fully or correctly implemented? The range and complexity of the RTI framework makes it particularly prone to this problem, as the national evaluation revealed (Balu et al., 2015).

Step 1. Develop an evaluation plan. A thoughtful, well planned evaluation may be crucial for helping schools reach full implementation. It creates a framework for school teams to set outcome goals and consider how their implementation plan will allow them to reach those goals. For example, if the school's goal is to increase reading achievement, intermediate and long-term evaluation outcomes should target specific changes, such as reductions in students requiring Tier 2 and Tier 3 intervention services, increased rates of growth on progress monitoring assessments, and improved performance on state and other summative reading assessments. This framework is important because setting long-term outcome goals on their own is unlikely to yield desired results without a theory of change that also addresses implementation and the behavior changes required for improvement to occur. That is, if a school team wants its reading scores to improve, how will it change how it delivers and monitors reading instruction? If the team says it is implementing RTI, is it actually implementing all components with fidelity?

Step 2: Evaluate fidelity and use data to adapt support. Taking the time to evaluate implementation fidelity on a regular basis, and adapt support accordingly, is essential for ensuring success. Literature on implementation science has stressed that fidelity matters and is likely the major reason programs either succeed or fail (Fixsen et al., 2005). In simple terms, *fidelity* can be defined as how implementation occurs, or the manner and quality with which a program or practice is implemented. Issues such as dosage or exposure, adherence to program components, and qualifications of implementers are all important aspects of fidelity (Dusenbury, Branigan, Falco, & Hansen, 2003; O'Donnell, 2008). When practices are implemented with fidelity, their implementation is likely to lead to improved student outcomes, assuming the practice has been validated through research. When practices are not implemented with fidelity, improved student outcomes are much less likely. Practitioners and educational decision makers should plan to engage in regular assessments and analyses of fidelity. Data from these assessments can help educators identify the potential reasons for poor outcomes and make important midcourse corrections that can improve their approach and, ultimately, their results.

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With respect to RTI implementation, it is important to remember that it is not a program or practice but a framework that involves multiple components. Assessing fidelity therefore needs to address fidelity to the overall framework and fidelity to each of the individual components (Jackson & Pierce, 2016). Tools such as NCRTI's Integrity Rubric (see Table 2) can support school teams in taking a closer look at their RTI implementation. The Integrity Rubric includes a 5-point rating scale, with anchor descriptions of low, moderate, and high implementation of 20 aspects of implementation related to the essential components of RTI—screening, progress monitoring, data-based

decision making, and multilevel instruction (NCRTI, 2010); nine aspects of implementation related to infrastructure support mechanisms; and an additional two related to fidelity and evaluation processes. The rubric is designed to be used as a self-assessment tool, in which teams of school staff work together to review their current practices and identify areas in potential need of improvement. NCRTI offers an accompanying interview and worksheet that staff can use to implement the rubric in this way.

As mentioned previously, the Balu et al. (2015) study provided a clear example of how fidelity may affect the degree to which RTI leads or does not lead to student outcomes. These data showed low fidelity of implementation with respect to multilevel intervention, one of the essential components of RTI. Additional areas in which implementation appeared to suffer, in many of the sample schools and in schools working with national TA centers, include lack of sufficient time for high-quality daily reading instruction at Tier 1, lack of sufficient time for Tier 3 intervention, and inappropriate use of screening cut points to identify students in need of Tier 2 intervention (Jackson & Pierce, 2016). Using the time and resources to evaluate fidelity of each aspect of RTI implementation is crucial and can help schools like those in the Balu et al. study avoid or address common challenges that can interfere with RTI's potential impact.

Action Item 4: Ensure Access for Students With Disabilities

Our final action item is that students with disabilities must have access to the full range of services offered through an RTI system, just as their peers do. Special education referral and eligibility processes, and service delivery approaches, should be integrated within the RTI framework. When this does not happen, not only are schools discriminating against students with disabilities, but also there are missed opportunities for special educators and general educators to share accountability, resources, and knowledge in ways that maximize the potential of the RTI framework to impact student outcomes.

One of the original purposes of RTI was to provide a more efficient and accurate way to identify, and ultimately serve, students with disabilities (Zumeta et al., 2014) and was described as such in IDEA 2004. Since then, implementation of RTI has grown rapidly and has evolved from a concept originally conceived by special education researchers to one that has become widely adopted by schools and districts to address the diverse instructional needs of their entire student body (Fuchs, Fuchs, & Stecker, 2010). In fact, many states have enacted policies or issued guidance recommending RTI as a strategy that is central to their overall general education reform agenda and, in particular, as a strategy with potential to turn around chronically underperforming schools. The recent Every Student Succeeds Act (2015) also supports the use of tiered systems such as RTI.

An unfortunate side effect of this evolution is that students with disabilities, once considered primary beneficiaries of the RTI approach, are now too often excluded from this model altogether. Our experience supporting hundreds of districts through NCRTI and NCII shows this trend. Excluding students with disabilities from the RTI system is problematic for several reasons. Not only is it denying access for students with disabilities to the full range of services offered to all students, but also it creates an artificial and inefficient division of resources. We have seen skilled interventionists who are limited to working only with students receiving intensive intervention through the RTI process—but not with those identified with disabilities. Conversely, we also have seen skilled special educators who are limited to working only with students with disabilities, typically by offering accommodation, consultative, or co-teaching support to general education teachers rather than direct intervention support for students. In addition, we have seen instances where schools convene two entirely separate teams of staff and use different data systems and processes to monitor student progress—one for special education and the

other for RTI (Gandhi, Vaughn, Stelitano, Scala, & Danielson, 2015).

Ultimately, ensuring that students with disabilities have access to the RTI system leads to better implementation of the system overall. Including students with disabilities and giving them access to each tier leads to more meaningful collaboration and sharing of knowledge among general education and special education teachers, an inclusive culture in which all staff share ownership and responsibility for the education of students with disabilities, and a priority placed on data-based decision making and instruction for all students.

Building the Knowledge Base: Next Steps and Further Directions

Our knowledge and procedures for supporting implementation of RTI—derived mainly from implementation lessons from years of providing TA to states, districts, and schools—might be characterized as "craft" expertise. There is increasing discussion and integration of implementation science in the work of federally funded TA centers that are supporting RTI implementation, with most of that knowledge drawing from fields outside of education. Although ED has made a substantial investment in the past 15 years to fund TA supporting implementation for both RTI and positive behavioral interventions and supports, there has not been any parallel investment of research funds within special education to contribute to the development of implementation science that could support this work.

We believe that the craft knowledge developed through ED investments is substantial, the evidence for that being the level of implementation fidelity that some TA centers have been able to achieve in the schools with which they have worked. For example, evaluation data collected from NCII partner schools showed steady overall growth in implementation fidelity across the 3 years in which they received support (Gandhi et al., 2016). In addition, studies on the implementation of tiered behavioral systems have seen associations between federal TA support and improvements in implementation fidelity (Horner et al., 2009).

However, the challenges of scaling this work with TA centers that are funded by ED to help SEAs develop the capacity to support RTI implementation within their states are exponentially more difficult. Although there are no representative data on the fidelity of RTI implementation within the United States, the school sites selected for the Institute of Education Sciences evaluation of RTI certainly raise concerns. Our work suggests the schools need a substantial amount of support when they are initially implementing RTI to train and provide ongoing coaching for staff. During this period, implementation fidelity needs to be assessed continuously, with follow-up support for schools designed to address the unique challenges of each school. The large number of schools that are purporting to implement RTI is an indication of the need for an extraordinary level of resources dedicated to supporting all of these schools. The good news is that some states are providing significant resources to support implementation, although even for those states it is not clear if these resources are adequate. In addition, schools that have achieved a high level of implementation fidelity may need some level of continuing support to sustain implementation and to benefit from advances in intervention research.

Schools need a substantial amount of support when they are initially implementing RTI to train and provide ongoing coaching for staff.

We argue that a new stream of research on RTI is needed—one that focuses on the conditions that support successful implementation—for the full RTI framework and for each of its components. Without a better understanding of RTI implementation, its potential for improving student outcomes cannot be determined. Some suggestions for future research include studies to determine minimum levels of fidelity needed to achieve

improvement; continued development and evaluation of evidence-based assessments and interventions, particularly those that target underserved groups and ages; long-term studies that examine sustainability of RTI implementation under varying conditions; and policy studies that examine the ways in which RTI implementation affects the educational experience and outcomes for students with disabilities. These kinds of studies will inform efforts to provide support to states, districts, and schools implementing RTI.

The importance of providing adequate levels of support on RTI implementation is particularly salient now. National data suggest that none of the initiatives undertaken in the past 2 decades to improve academic achievement of students with disabilities has had any discernable effect on a national scale. These efforts include the 1997 amendments to IDEA requiring that students with disabilities be included in state and district assessments, the requirements of the No Child Left Behind Act of 2001 that specified that students with disabilities were an accountable subgroup for schools, and the requirements of the 2004 IDEA amendments related to the use of RTI (34 C.F.R. § 300.307). Recently, OSEP launched its Results Driven Accountability (RDA) initiative, which might be the best opportunity to use what has been learned from the past 20 to 30 years of intervention research and the past 2 decades of TA investments to actually improve learning outcomes for students with disabilities. Under RDA, states must set measurable child-level outcome targets and implement evidence-based strategies to achieve those targets. Knowledge gained from research and TA will be essential to support states as they carry out these ambitious plans.

Special education has historically maintained a close connection between research and practice that has resulted in significant improvements in services and results for students with disabilities—for example, through technology innovations and development of model programs for infants and toddlers with disabilities. We believe that widespread, high-quality implementation of RTI will be necessary to obtain improvements in academic outcomes for students with disabilities and that this is a vastly more difficult challenge. An ongoing research agenda that both informs and is informed by lessons learned from national implementation efforts can support this aim.

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