National Implementation of Response to Intervention (RTI): Research Summary

By

John J. Hoover, University of Colorado-Boulder
Leonard Baca, University of Colorado-Boulder
Emily Wexler-Love, University of Colorado-Boulder
Lauren Saenz, University of Colorado-Boulder

Abstract

The current national trend in today’s schools is to meet the needs of struggling and at-risk learners through the implementation of multi-tiered response to intervention models. This research sought to better understand the national perspective of RTI by investigating the level of emphasis of current and projected state-wide efforts for implementing RTI from the perspectives of special education state department directors in all 50 states and the District of Columbia. An 86% response rate was obtained and every state indicated some emphasis on RTI either in current practice or in development. Statewide training efforts are underway in 90% of the states primarily emphasizing an overview of RTI, progress monitoring and the use of data-driven decision-making. The areas receiving less training emphasis include culturally responsive RTI and roles of educators in implementing response to intervention. Over one-third of the states indicated that they plan to use RTI, in part, as a replacement or supplement to the learning disability discrepancy model. In addition, most states indicated that they are or plan to use a combined problem solving-standard treatment protocol model for making multi-tiered RTI decisions. Suggestions for additional research are also provided. Data were gathered during the spring and summer, 2007.

Note: Research was conducted through the Special Education Leadership and Quality Teacher Initiative, BUENO Center-School of Education, University of Colorado, Boulder. For additional information contact John J. Hoover, Ph.D. at: john.hoover@colorado.edu
Introduction

When the Individuals with Disabilities Education Improvement Act (IDEIA) was reauthorized by Congress in 2004, the revised language changed, in part, the way in which struggling students can be diagnosed as learning disabled (LD). Previously, the law required educators to use a “discrepancy model” – often relying on a 1.5 to 2.0 grade level difference between expected and actual student performance. The reauthorization of IDEIA modified this requirement and introduced an alternative means of identifying a disability, known as responsiveness to intervention, or RTI:

In determining whether a child has a specific learning disability, a local educational agency may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures (IDEIA 2004, Sec. 614.b.6.B).

The emerging RTI models rely on a multi-tiered system (usually three or four tiers) of evidence-based interventions, becoming progressively more intense based on student responses to those interventions (Hoover & Patton, 2008). The existing model used in our school systems for several decades known as the discrepancy model (also referred to as the “wait to fail” model) for determining students’ eligibility for a learning disability has endured heavy criticism (Bender & Shores, 2007; Brown-Chidsey & Steege, 2005; Fletcher, Denton & Francis, 2005). While RTI as a replacement for the discrepancy model has its critics and is being heavily debated, it is being seriously considered by many state departments as the predominant method of choice for meeting the needs of students at-risk and those struggling with learning. Within this debate, Gresham (2005) identified four advantages that RTI holds over the discrepancy model: (a) early identification of learning problems, (b) use of a risk model rather than a deficit model, (c) reduction of identification biases, and (d) focus on student outcomes. It is not the focus of this paper to debate the benefits of RTI over the discrepancy model; rather, given the apparent wide-spread emphasis in the development and use of RTI our study was designed to identify how state departments perceive RTI and their current emphases in developing and implementing RTI in their school districts. This article summarizes feedback from special education state department directors or their designees on their states’ efforts to develop and implement RTI.

Background

In 2005, the National Joint Committee on Learning Disabilities (NJCLD) issued a report in which it encouraged the further study of the many issues influencing and resulting from RTI implementation “in order to guide its thoughtful implementation, advance the field of special education, and enhance the academic outcomes and life success of all students, including students with learning disabilities” (National Joint Committee on Learning Disabilities, 2005, p. 258). According to Jimerson, Burns and VanDerHeyden (2007), RTI shows considerable promise; however, additional research is needed to evaluate various aspects associated with this growing practice. These authors also wrote that “implementation integrity will be the most significant obstacle to
overcome when implementing RTI on a national level” (p. 7). RTI is a multi-component system that requires general education and special education teachers to work together to collect and analyze student data, make data-based decisions, and apply appropriate instructional interventions based on individual student needs (VanDerHeyden, Witt, & Barnett, 2005). Therefore, integrity of the implementation is crucial (i.e., fidelity). Also crucial to the successful development of RTI in various settings, is communication and dissemination of information across states, districts, and schools to assist in addressing the large-scale implementation issues.

**Research Significance**

Much of the current research on RTI focuses on field studies of particular interventions, implementation processes, and the identification of best practices in RTI sites. While these studies are crucial to the success of RTI, according to the NJCLD (2005) research pertaining to large-scale RTI implementation is also important. In addition, Callender (2007) wrote that at the:

state levels, RTI raises additional issues, including how it will impact the percentage of students who qualify for special education, how to provide large-scale trainings and support, and how to ensure proper and uniform practice within schools (p. 331).

Therefore, it is critical to collect information on a macro level as to where and how RTI is being implemented across the country within the different states. Little is known about the national efforts that states are collectively undertaking in their shift to large-scale implementation of RTI. Results from this research provide information about the efforts that state special education departments are undertaking to promote and support the implementation of RTI, which in turn helps to formulate a comprehensive national RTI perspective.

**Methods**

This research included the collection and analysis of survey data designed to gather information about current and projected response to intervention efforts in each state and the District of Columbia. Research methods included identifying significant RTI topics, survey development, selection of respondents, and data gathering and follow up procedures in this descriptive study.

**Critical RTI Topics**

In designing this research, we identified from the literature several areas considered critical to the successful development and implementation of RTI (Bender & Shores, 2007; Brown-Chidsey & Steege, 2005; Fuchs & Fuchs, 2006). Specifically, information on the following topics was gathered through this project:

1. Current and projected RTI emphasis in the states
2. Percentage of districts within the states using RTI
3. Purposes for using RTI
4. Current/Existing developments for statewide training of educators to use RTI
5. Topics most/least emphasized in the statewide trainings
6. RTI decision-making model(s) most/least used by the states’ school districts as well as the use of RTI specialists to assist with implementation

Survey Development

The survey consists of 18 items addressing both demographic information and the general nature of the RTI programs and trainings that are currently being implemented or are in development in each state from the perspectives of state directors of special education. The items were designed to gather information about the emphasis of statewide RTI implementation as rooted in materials defining the multiple components of RTI, as described above. The instrument was developed and field reviewed by several educational experts to determine clarity of items and accuracy of item content to best address the six areas described above. The development included input from several professionals actively involved with RTI at both state and national levels, including two professionals associated with RTI efforts in the National Association of State Directors of Special Education (NASDSE). Necessary revisions were made based on professionals’ feedback, including clarification of selected items, resulting in the survey that reviewers perceived to be clear and accurate in content (see Table 1).

TABLE 1
Response to Intervention (RTI) Survey

The survey below assesses your state’s efforts in using Multi-Level Instruction (e.g., Three-Tiered Instruction) and Response to Intervention to meet the needs of learners at-risk.

<table>
<thead>
<tr>
<th>Name of State: _________________________</th>
</tr>
</thead>
</table>

Please respond to each item as it reflects your state-wide efforts in the area of RTI.

Is your state currently implementing or considering implementing some form of RTI?

Currently Implementing: Yes No

Considering Implementing: Yes No

If YES to EITHER, please respond to the following:

For which purpose(s) are you considering using RTI (Check ALL that apply):

- Instructional Decisions (e.g., level or intensity of interventions to be used)
- Determining Eligibility for Special Education Services or Placement
- Replacement for Identifying Learning Disabilities (i.e., eliminate discrepancy emphasis)
### National Implementation of RTI

<table>
<thead>
<tr>
<th>Approximately what percentage of your state’s school districts are currently using RTI and Three-Tiered Learning</th>
<th>&lt; 10%</th>
<th>10-25%</th>
<th>26-50%</th>
<th>51-75%</th>
<th>&gt; 75%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Are state-wide RTI training efforts currently in place or being developed:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If yes, *Circle* extent the training emphasizes each item: 1-Limited; 2-Some; 3-Extensive

<table>
<thead>
<tr>
<th>Overview of RTI Principles and Practices</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process of education within each Tier of Instruction</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>School/District changes needed to successfully implement RTI</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Roles of various educators in RTI (Diagnostican, Principal, Teachers)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Progress-Monitoring Procedures</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Use of RTI to make special education decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Role of Existing Pre-Referral Practices in RTI</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Evidence-Based Interventions implemented with fidelity</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Culturally Responsive Instruction within RTI</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

| Which Decision-Making Model is your state considering/recommending that districts use: | Team Problem-Solving (Team process, personalized based on unique student needs) | Standard Treatment (Use of same standard protocol for all learners with similar needs) | Combined Problem-Solving and Standard Treatment Methods |
|---|---|---|

<table>
<thead>
<tr>
<th>Do districts use services of an RTI Specialist to implement Tiers 2/3</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>
Respondents

The survey was mailed to directors of special education in each of the state departments and District of Columbia describing the purpose of the study and requesting their completion of the survey. The national scope of this study was clearly articulated to the respondents emphasizing the goal of obtaining a national perspective concerning the implementation of RTI across the United States. To this end, the ultimate outcome was to provide grouped data results with no reference to individual states to ensure confidentiality and accuracy of responses. State directors of special education were selected due to their collective involvement in the national RTI movement over the past several years through the National Association of State Directors of Special Education (NASDSE). A variety of NASDSE professional events have been conducted for its members along with the publishing of numerous documents addressing the topic of RTI. Recent professional events included a satellite conference that discussed state RTI models and their implications to specific learning disabilities and a Policy Forum, summarized by Burdette (2007), in which a NASDSE national RTI initiative is referenced and discussed.

Recent publications include Response to Intervention: Policy Considerations and Implementation (NASDSE, 2005) and Response to Intervention: Research for Practice by Griffiths et al., (2007), written specifically for NASDSE. In the 2007 publication, Bill East (NASDSE Executive Director) wrote in the Foreword “For the past several years the National Association of State Directors of Special Education has had a special interest in response to intervention” (p. i). In addition, the 2005 NASDSE book has seen over 73,000 copies printed since its initial publication. These and similar examples clearly illustrate the significant involvement of state directors in providing leadership in the RTI implementation in their states, making them highly qualified to provide or facilitate the gathering of accurate responses to the items requested in the research.

Data-Gathering and Follow-Up Procedures

Every effort was made to contact all states and the District of Columbia to secure information on their state-wide RTI efforts. The first mailing (February, 2007) yielded a 63% return rate and a follow up second mailing brought us to a 75% return rate. We then proceeded to contact the remaining respondents via email communication/phone contacts and after two additional attempts (April and June, 2007, respectively) an 86% return rate was reached. However, efforts did not yield a completed survey for the remaining seven states and the researchers were not able to determine any particular reason these states elected to not respond. As indicated, survey responses were provided in confidence with no reference being made to individual states in the data analyses and reporting of results.

Results

After completion of the follow-up procedures discussed above, a highly respectable 86% response rate (44 of 51 responses) was obtained. Of those who responded, 82% indicated their educational position in the state department. This
included 37% completed by the state directors of special education while the remaining surveys were completed by others designated by the director who are closely involved with the RTI efforts in their states (e.g., specialists, supervisors, coordinators). The following summarize the results specific to each of the targeted RTI areas assessed.

**Stage of RTI Implementation**

Respondents were initially asked if and to what extent their state was engaged in developing and implementing RTI on a statewide basis. Of the 44 state responders, 100% report that they are either currently implementing or are considering implementing some form of an RTI model. More specifically, 16 of the states were reported to be in the planning stages for implementing an RTI model while 28 states are already implementing response to intervention.

**Percentage of Districts Using RTI**

Respondents were also asked to identify the approximate percentage of school districts within their states currently implementing RTI. Seventeen state responders indicated that less than ten percent of the districts in their states are currently using an RTI/Multi-Tier model. Eleven state responders indicated that 10-25% of their districts are using an RTI/Multi-Tier model. Four reported that 26-50% of their districts are and one indicated that over 75% of their districts are using an RTI/Multi-Tier model. Eleven state responders either did not answer or reported that such statistics are currently unknown.

**Purposes for RTI**

Respondents were asked to clarify the specific purpose(s) they emphasized in using RTI in their states' schools (i.e., 1-Instructional decision-making; 2-Determining eligibility for special education; 3-Replacement for the traditional discrepancy formula model). Fifteen (34%) respondents indicated that they are considering RTI for each of the three purposes of making instructional decisions, determining eligibility for special education services or placement, and as a replacement for identifying learning disabilities (i.e. eliminating discrepancy emphasis). Twenty-four responders (55%) indicated that they are considering RTI for the two purposes of making instructional decisions and determining student eligibility for special education services and placement in their states. Two states see the purposes of RTI to be for making instructional decisions and eliminating the discrepancy model and three state responders indicated that they are considering RTI only for the purpose of making instructional decisions.

**Statewide Training Efforts**

The critical element of training and preparing educators for successful development and implementation of RTI was also addressed in this research. Respondents were asked to identify their current or projected efforts in training their state educators in RTI. Forty-one state responders (93%) reported that training efforts were underway to prepare educators for effective use of RTI. Three responders reported that currently no statewide RTI training efforts were in place or being developed in their states.
Statewide Training Areas of Emphasis

As discussed above, 41 of the 44 states have some form of statewide RTI training either in development or in-progress. These 41 responders were then asked to identify the emphasis their training placed on ten critical RTI areas as discussed in the previously identified literature sources. Therefore, in addition to the use of statewide training, responders identified the extent to which their statewide training efforts emphasized specific objectives by responding to a series of ten Likert items (1-3 scale; 1=Limited emphasis, 2=Some emphasis, 3=Extensive emphasis). Thirty-eight of the 41 state responders (93%) responded to these items. Their responses are illustrated in Table 2.

Table 2. Statewide Training Initiatives Results

<table>
<thead>
<tr>
<th>Statewide Training Efforts</th>
<th>Mean value</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of RTI principles &amp; practices</td>
<td>2.58</td>
<td>.59</td>
</tr>
<tr>
<td>Progress-Monitoring procedures</td>
<td>2.58</td>
<td>.66</td>
</tr>
<tr>
<td>Data driven decision making</td>
<td>2.55</td>
<td>.65</td>
</tr>
<tr>
<td>Process of education within each tier of instruction</td>
<td>2.31</td>
<td>.74</td>
</tr>
<tr>
<td>Evidence based interventions</td>
<td>2.31</td>
<td>.80</td>
</tr>
<tr>
<td>School/District changes needed to successfully implement RTI</td>
<td>2.30</td>
<td>.76</td>
</tr>
<tr>
<td>Roles of various educators in RTI</td>
<td>2.11</td>
<td>.79</td>
</tr>
<tr>
<td>Uses of RTI</td>
<td>2.10</td>
<td>.72</td>
</tr>
<tr>
<td>Role of existing prereferral practices in RTI</td>
<td>1.89</td>
<td>.79</td>
</tr>
<tr>
<td>Culturally responsive instruction in RTI</td>
<td>1.68</td>
<td>.74</td>
</tr>
</tbody>
</table>

Scale of Emphasis: 1=Limited; 2=Some; 3=Extension

As shown, on average, the respondents indicate that in their statewide training efforts they place the most emphasis on three features: Overview of RTI Principles and Practices (mean=2.58); Progress-Monitoring Procedures (mean=2.58); and Data Driven Decision Making (mean=2.55). State-wide trainings place the least amount of emphasis on Culturally Responsive Instruction within RTI (mean=1.68). The responses also show that on average, the Role of Existing Pre-Referral Practices in RTI (mean=1.89) receives the next lowest amount of consideration in statewide training efforts, followed by training educators in the uses of RTI and associated roles. In addition, the standard deviations show variation across states in the ten training areas, suggesting that variability exists in consensus in terms of the extent training areas are emphasized. However, each training area receives some emphasis in the state-wide trainings.
Decision-Making Model

A critical aspect of the successful implementation of RTI is the decision-making model used to base decisions concerning level or intensity of intervention most appropriate for the learner. This research surveyed state respondents asking them to identify the predominant model(s) (Fuchs & Fuchs, 2006; Jimerson, Burns, & VanDerHeyden, 2007) being or to be used in their states (1-Problem Solving; 2-Standard Treatment Protocol; 3-Combined Problem-Solving and Treatment Protocol). Forty-one of the forty-four state directors (93%) responded to this item. Of those responding to this item, twenty-four state respondents indicated that they are suggesting that districts utilize a combined problem-solving and standard treatment method model for decision making, while thirteen state departments are suggesting that districts use a team problem-solving model to make RTI decisions. Only one state reported suggesting that districts use only the standard protocol model. In addition, three state directors indicated that they were still in the process of deciding which method(s) to use or recommend. (Researchers were unable to determine why the three remaining state directors did not respond to this particular item).

RTI Specialist

Respondents were also asked whether an RTI Specialist was employed to assist districts with the development and implementation of RTI. Out of the forty-four respondents, only four (9%) responded that they use an RTI specialist to implement RTI support for their states’ school districts.

Discussion

The descriptive data collected through this project reveals that three years after the reauthorization of IDEIA and the introduction of RTI language into the law, we remain in the beginning stages of a national RTI movement. This transition period is critical; the foundational work being carried out in individual states will ultimately impact the educational opportunities for all students in our schools. On the macro, national level of RTI, virtually all states and the District of Columbia are either in the process of implementing RTI or are currently using this approach to meet the needs of struggling learners. Most special education state departments are using or recommending to their school systems that they employ a combined decision-making model utilizing components from both team problem-solving and the standard treatment protocol approaches. In regards to training, state departments are providing much needed training to educators. Although some variation exits, state-wide trainings are emphasizing some of the same key aspects while placing less emphasis on other similar training areas.

For example, the topics of progress-monitoring and data-driven decision-making are more heavily emphasized in trainings; however, culturally responsive RTI and the role of educators in the RTI process were reported to be less emphasized. This lack of emphasis on culturally responsive RTI may have long-term significant impacts on the decision making for culturally and linguistically diverse learners throughout our schools, particularly since cultural responsive RTI may be complicated to implement (Orosco,
Another training area receiving less emphasis pertains to the role of various educators in RTI. This particular training area is critical to ensuring the successful implementation as confusion with roles may facilitate confusion and potentially disjointed efforts in implementing RTI across schools and districts. In addition, the fact that an RTI Specialist is not used to provide support to the many school systems in the states suggests that districts are individually developing and implementing RTI based, to some extent, on knowledge and expertise received primarily from statewide trainings as well as their own professional development, research, and trainings.

In addition, while not specifically requested on the survey, some responders provided narrative comments to further clarify their states’ RTI efforts and associated implementation barriers. Information provided from several state respondents indicated the nature of these efforts and obstacles. Some state departments are still in the early planning stages. For example, one department indicated that it is waiting for the recommendations of a state RTI Task Force in order to develop their statewide guidelines and trainings. Another responder provided us with specific questions that states in their region of the country submitted prior to a meeting held in the spring of 2007 to discuss the implementation of RTI. The questions identified by these different states are in line with the survey used in this study and support many of our recommendations for research. Issues associated with state-wide communication and training were also expressed.

Finally, many of the states are using or planning to use RTI as a means for identifying learning disabilities, replacing or supplementing the learning disabilities discrepancy model. Given the current questions and concerns in the field regarding RTI as a potential replacement for the discrepancy model, caution must be exercised before we implement RTI as a sole means for determining learning disabilities. We must gather more research data on the impact of RTI on its ability to accurately identify learning disabilities. However, approximately two-thirds of the state departments are indicating that while they are using RTI in their decision-making, they are not as of yet using RTI to totally replace the learning disability discrepancy model. This suggests that, at present, use of a combined approach may be emerging, in which aspects of both RTI and the discrepancy model are used in decision-making for learning disabilities.

Research Limitations

This research was designed to gather initial information on the current and projected national efforts underway to develop and implement response to intervention in our nation’s schools from the perspectives of state directors of special education. While this study provides valuable and useful information about current efforts it is limited to the perceptions of the state director or designee of special education and his/her associated knowledge of actual RTI practices in school systems. However, as discussed in the Methods Section, NASDSE is comprised of state directors of special education and this organization is heavily involved with national RTI efforts and policy. In addition, while some responders provided narrative comments to further clarify their states’ RTI efforts, this was not requested on the survey and comments received and reported may not be representative of all states. Also, as stated, state directors from seven states did not
respond to the survey and a few of the items were not responded to by some state directors who returned the survey. These lack of responses, while representing only a few states, may also limit the results of this study.

**Research Implications and Recommendations**

Two points are clear from the results of this study. First, national, large-scale RTI implementation appears to be an eventual certainty in the United States. Second, this implementation currently varies widely from state to state, both in its progression and in its emphases and components. Ongoing data collection and reporting will ensure that states have access to building a base of resources and knowledge upon which they can draw as they work out their own implementation plans. In particular, several conclusions may be drawn:

*First*, the implementation of RTI exists on a national (macro) level. Within this effort, a combined problem-solving/standard treatment protocol decision-making process appears to be the method of choice. Additionally, the national effort to reduce or eliminate the current LD discrepancy model for identifying learning disabilities through RTI is beginning to take hold; however, most states indicate that they are not currently completely replacing the discrepancy model with RTI as a means for identifying learning disabilities.

*Second*, information about RTI implementation within individual states remains incomplete, which must be addressed to best understand RTI on a national level. Some state department responders, for example, had general knowledge about their districts’ efforts, yet they lacked in-depth knowledge of the extent to which individual districts were implementing RTI. Information dissemination and data collection are critical to ensure implementation fidelity to best understand a national RTI perspective. Therefore, developing the means to manage such tasks is crucial in the early stages of a transition towards RTI on a national and state-wide basis.

*Third*, among all states, culturally responsive instruction was reported as the least emphasized objective in statewide RTI training efforts. This finding suggests that, although the school population is becoming increasingly more diverse, with a minority population estimated at one-third of the total United States’ population (U.S. Census, 2006); culturally responsive instruction is not yet a priority in statewide RTI efforts. Many have argued that culturally responsive instruction is a necessary component in providing culturally and linguistically diverse students with equal educational opportunities (Gay, 2002; Hoover, In Press; Hoover, 2009; Villegas & Lucas, 2002; Wlodkowski & Ginsberg, 1995). Although less emphasized in state-wide trainings, several respondents requested assistance to incorporate cultural response RTI in their trainings.

*Fourth*, as discussed, a combination of problem-solving and standard treatment procedures appears to be the decision-making method of choice recommended by most state departments. This finding supports the idea that RTI is not a one-size-fits-all policy and that states are able to take advantage of the flexibility they need in order to best serve all students.
Therefore, based on the results and within the limitation parameters of this study, it is apparent that we need to focus on several related areas of research in order to best understand national efforts in the implementation of RTI. This includes investigating:

1. Significance of the importance of variations within and across states in the implementation of RTI and associated training

2. Barriers that state departments are facing in the implementation of RTI

3. The manner in which individual states define/operationalize RTI (i.e., culturally responsive teaching, data-driven decision making, etc), including educator roles in RTI

4. Models used for statewide trainings and the effects of those trainings on the implementation of RTI at the school level

5. Extent to which struggling learners are identified early in the process thereby reducing the need for special education referral and/or placement (i.e., effectiveness of RTI decision-making models)

6. Role and policy implications of RTI in the identification of a learning disability on a national as well as state level

7. Practices used within a combined problem solving-standard treatment decision making model in the states’ school districts

Overall, as state departments more fully operationalize RTI, the national perspective of this educational practice will become more evident. Additional research is needed to further clarify the national implications of RTI, particularly as it relates to the identification of learning disabilities, along with best practices to meet the various statewide challenges, barriers and training issues revealed through this research project.
References


