



Executive Summary of the NRCLD Topical Forum Applying Responsiveness to Intervention to Specific Learning Disability Determination Decisions

September 29-30, 2005
Kansas City, MO

The passage of the Individuals with Disabilities Education Improvement Act of 2004 has opened new doors for education agencies in regard to how they assess and identify students with specific learning disabilities. The language of the law allows states and districts to continue to use aptitude-achievement discrepancy formulas or to adopt methods based on whether students respond to scientifically-based instruction. In special education literature, this process is generally considered to refer to responsiveness to intervention (RTI).

In September 2005, the National Research Center on Learning Disabilities (NRCLD) sponsored an invitation-only forum to look closely at applying responsiveness to intervention (RTI) to specific learning disabilities (SLD) determination decisions. Thus far, research and school-based practices have perceived RTI as a prevention model focused on accelerating students' academic progress. Little attention has been given to technical questions and issues concerning the identification, eligibility, and classification of children with learning disabilities. Specifically,

- What screening procedures and



measures are effective?

- What monitoring methods are efficacious?
- How do you define which students are at risk?
- How do you determine whether a student is responding to instruction?
- How much information (data) is needed to make these decisions?

As state and local education agencies examine and revise their SLD determination procedures in the general education setting, these are the specific, practical questions and issues they will need to address. This research-focused forum was intended to move RTI discussions forward, especially in regard to these important technical issues.

Research groups were invited to participate in the forum if they had conducted studies that met the following criteria:

- The researchers included at least two RTI tiers (general education instruction and small group intervention) and collected efficacy data for the second tier.
- At a minimum, the investigators collected pretreatment and posttreatment data on the effectiveness of RTI. Preferably, researchers also collected data (a) from RTI progress monitoring measures (e.g., weekly curriculum based measurement data) and (b) on students' pretreatment cognition, language, and demographics.
- Researchers used a control group, although "control" might be liberally defined (e.g., historical controls).
- Research teams focused on the use of RTI in elementary reading

Five Forum Research Studies/Groups

FLORIDA STUDY

- Joseph K. Torgesen, Ph.D. (presented by Christopher Schatschneider, Ph.D.)

Florida State University

KANSAS MULTI-STATE STUDY

- Debra Kamps, Ph.D.
- Charles R. Greenwood, Ph.D.

University of Kansas

TENNESSEE STUDY

- Douglas Fuchs, Ph.D.
- Lynn S. Fuchs, Ph.D.
- Donald L. Compton, Ph.D.

Vanderbilt University

TEXAS STUDY

- Patricia G. Mathes, Ph.D. (presented shared data of co-investigators Jack Fletcher, Ph.D., & Carolyn Denton, Ph.D., University of Texas)

Southern Methodist University

WEST VIRGINIA STUDY

- C. Melanie Schuele, Ph.D.
- Laura Justice, Ph.D.

**Vanderbilt University
University of Virginia**

programs, specifically kindergarten through third grade. To date, the majority of RTI studies have been limited to this narrow application. In all, 12 researchers participated in the discussion with five research groups presenting data during the forum.

NRCLD developed a set of questions, which served as a common framework for all researchers as they re-examined their study results in light of forum goals. Not all research groups were able to address every question. The relevant findings are summarized in the following sections.

HOW DO DIFFERENT RTI MEASURES AND CLASSIFICATION PROCEDURES AFFECT PREVALENCE, DEMOGRAPHICS, AND SEVERITY OF RISK AND DISABILITY?

Data collected in several of the studies allowed researchers to compare various procedures for determining reading-disability status.

Specifically, research groups were asked to consider the following measurement/ classification systems with regard to their data:

- Median split on growth
- Benchmark (e.g., 30th percentile or a benchmark of less than 40 words read correctly in one minute at the end of first grade)
- Dual discrepancy (posttreatment level and rate of growth from pretreatment to posttreatment)

Across the five research groups, a dual-discrepancy approach to identifying reading disability worked reasonably well to identify the “right” children—those truly at risk—without identifying a large number of children who later were reading normally.

Some measures administered only at one point in time seemed to do as

well as multiple assessments of growth in identifying first-grade students who were reading very poorly in second grade.

The median split on growth approach identified a large number of students as having severe reading problems but also identified many false positives.

HOW DOES PREVENTION AFFECT PREVALENCE, DEMOGRAPHICS, AND SEVERITY OF RISK AND DISABILITY?

This question encouraged researchers to consider whether instruction in Tier 2 interventions had any effect on the number of students ultimately identified as having reading problems and the severity of those problems. Across studies, students who received Tier 2 interventions performed better on reading assessments and had lower reading problem rates than students who did not receive Tier 2 intervention instruction. Multi-tiered phonological awareness interventions that begin in kindergarten differentiate children who are responsive to instruction/intervention and those who are not and, thus, are likely to continue to have difficulties.

HOW MANY DATA POINTS ARE NECESSARY BEFORE WE CAN DISTINGUISH SEVERE UNDERACHIEVERS FROM ACHIEVERS?

Only one research group directly addressed this question. The researchers determined that a slope calculated

Three Common Research Questions

1. How do different RTI measurement and classification procedures affect prevalence, demographics, and severity of risk and disability?
 - *Can we define RTI and develop a rubric from the data collected?*
 - *Do we have other information besides RTI to add to help with the decision-making process: pre-treatment data, behavioral ratings, cognitive scores?*
 - *Do we have longitudinal data (follow-up)?*
2. How does prevention affect prevalence, demographics, and severity of risk and disability?
 - *What are the treatment characteristics?*
 - *Can we look at the impact of instruction on children classified according to different schemes and then aggregate across studies?*
3. How many data points are necessary before we can distinguish severe underachievers from achievers?
 - *What does progress monitoring look like: Tier 1 through Tier 3?*
 - *Can we define severe underachievement (responsiveness vs. nonresponsiveness)?*



after five data points (five weeks, in this study) will predict fairly well the slope at nine points. Students who were not responding adequately at nine weeks were referred for more intense instruction. Thus, results from this study suggest accurate identification of at-risk students may be made much sooner than some previously thought.

By contrast, another research group presented two case studies to illustrate how much time may be needed to determine whether a student's response to instruction is inadequate and Tier 3 (special education) instruction is necessary. In both cases, students showed significant growth in their oral reading fluency scores only after they had received 27 weeks of Tier 2 intervention.

Another study, which investigated kindergarteners, determined that three points of measurement (fall, midyear, and spring) in kindergarten could be used to examine rate of growth over the year to differentiate nonresponders from responders.

In follow-up discussion among forum participants, several researchers questioned whether 27 weeks of Tier 2 instruction constituted the provision of extraordinary measures that could not reasonably be expected of classroom teachers.

For brief overviews of each research presentation and snapshots of the data presented, see www.NRCLD.org.

In addition to addressing the forum questions, results from several studies raised additional questions and prompted discussion about other RTI features, practices, and procedures issues.

Inadequate response to Tier 2 instruction. One research group looked at the percentage of children who do not respond adequately to Tier 2 intervention. This study focused on two groups of students; each group received a different Tier 2 intervention. Using the Woodcock-Johnson III Basic Reading test or Test of Word Reading Efficiency to measure outcomes, 2 percent of the students in one group and 8 percent of students in the second

group (or less than .5 percent and 2 percent of the total student population) did not respond adequately to instruction. Using DIBELS Oral Reading Fluency measures, the percentage of students who did not respond adequately was 10 percent for the first group and 8 percent for the second group (less than 2 percent of the total population in both cases).

Fidelity of instruction. Another study examined how a school's strength of treatment—adequacy implementing a curriculum—affects outcomes. The study ranked schools based on six criteria to calculate a rating score* for each school:

1. Core curriculum is evidence based.
2. Fidelity of implementation of core curriculum is 86 percent or better.
3. Small-group reading intervention is provided for at-risk students (secondary interventions).
4. Fidelity of implementation of core curriculum is 86 percent or better.
5. Data-based decision-making is used with intervention.
6. A reading coach/instructional leader manages the reading intervention.

In schools with higher ratings on these criteria, students performed better on various measures than students in schools with lower criterion scores.

**Adapted Planning and Evaluation Tool for Effective Schoolwide Reading Programs (PET; Kameenui & Simmons, 2002).*

RTI implementation. Several points of agreement emerged among participants:

- Effective use of RTI requires a strong commitment from general education. RTI is based on the premise that students receive research-based curriculum and high-quality instruction in Tier 1, or general education. Tier 2 intervention involves general education teachers collaborating with other staff to provide more intensive



instruction targeting specific areas of weakness. Students who do not respond adequately to Tier 1 instruction and Tier 2 intervention may be considered for additional, individualized instruction, possibly special education.

- Although thus far RTI has been used primarily for prevention of learning difficulties, it can have a significant role in SLD identification. Research findings shared at the forum provide guidance to state and local education agencies in regard to the procedures and measures that can be used to make SLD identification determinations based on RTI data.
- Participants agreed that special education or special education-like services have an important contribution to make in RTI implementations. The role of special education has not been clearly defined.
- The researchers expressed their support of RTI as a process that, when implemented well, eliminates poor instruction as a viable explanation for a students' failure, thus increasing the likelihood that a student who is not responding adequately does have a disability.

Further research needed. Although the results of these studies indicate some areas of agreement, the picture of RTI, especially regarding procedures for SLD determination, is still unclear. Among the concerns and questions raised during the forum were the following:

- In an RTI model, students will inevitably move among tiers, from Tier 1 to Tier 2 and back again; from

Tier 2 to Tier 3, then back to Tier 1; and so on. Further consideration as to how to manage this aspect of an RTI implementation is warranted. Specifically, what data need to be collected and used to help determine this student movement?

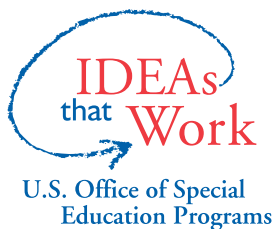
- To date, much research on RTI has focused on reading decoding skills, and a majority of the outcome measures used in the studies presented at the forum assessed students' decoding skills. Participating researchers expressed concern that reading comprehension is not being addressed and that reading comprehension deficits may not appear until later in a child's education. Likewise, RTI research so far has not addressed other specific learning disabilities, such as math.
- The success of RTI models relies heavily on the use of research-validated interventions to address students' needs. Currently, such

interventions exist for some academic areas (e.g., reading) at some instructional levels (e.g., kindergarten and first grade), but a lack of interventions in key areas may mean RTI implementations are not practical for all students.

These questions bear further discussion and research as more schools adopt an RTI approach to providing services for students and consider RTI as one component of SLD determination.

REFERENCES

- Kameenui, E.J., & Simmons, D.C. (2003). Planning and evaluation tool for effective schoolwide reading programs—revised (PET-R). Retrieved January 19, 2006, from <http://oregonreadingfirst.uoregon.edu/downloads/PET-R.pdf>.



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