Response to Intervention and Reading Difficulties: A Conceptual Model That Includes Reading Recovery

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Reading Recovery (RR) is a widely used first grade intervention program for students who are struggling with literacy skills. With its component strategies, teacher training, high degree of fidelity of treatment, specified timeline, and cut-off score defining which students have succeeded, RR fits the problem-solving approach of the Response-to-Intervention (RtI) model. This conceptual article provides a description of (1) the RtI paradigm, (2) where RR could fit as a component intervention, and (3) what additional remedial activities and assessments could help school teams have insight as to which students with reading disabilities (RD) should be identified for long-term programming.

The traditional model for assessing students as struggling readers and writers is at the center of a fundamental debate in the educational community. The discussion focuses on two issues. First, schools have traditionally offered students the opportunity to learn reading and writing skills until third grade before addressing significant deficits (commonly referred to as the "wait to fail" model). Because of delayed consideration with regard to having specific difficulties with reading and writing skills, these students have demonstrated more severe literacy-skill deficits in later grades. This makes the task of learning and using strategies more difficult. Second, many in the educational community have rejected the use of intelligence tests as a prime component in determining the required discrepancy between intellectual potential and academic achievement (Lyon, Fletcher, Shaywitz, Shaywitz, Torgensen, Wood, et al., 2001; Siegel, 1999). The alternative assessment model included in the United States Congress' reauthorization of the Individuals with Disabilities Education Act (IDEA; 2004) is Response to Intervention (RtI). This article provides a conceptual model for RtI with Reading Recovery as a first-grade intervention component. Following a description of RtI and Reading Recovery's origins and elements, this author discusses how Reading Recovery could provide a means for programming and assessment so as to help define students' possible classification as having a learning disability.

History and Rationale for RtI

The underlying principles for RtI relate to a National Research Council report (see Heller, Holtzman, & Messick, 1982) which suggested that the validity of special education classification be based on following six criteria: (1) the general

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education programming will be adequate for learning to occur; (2) an effective intervention program will determine if classification is warranted; (3) the school team will demonstrate that students who are placed in special education receive academic programming likely to lead to improved outcomes not available in a general education classroom; (4) classified students will receive high-quality, effective instruction; (5) data from an annual review of a student's progress will indicate whether continuing in special education programming is warranted and whether school staff has demonstrated effort for the child to meet the specifically identified educational objectives; and (6) educational administrators at the district, state, and national level will regularly monitor placement data for particular groups, schools, and districts to ensure that appropriate instruction and procedures be provided to redress inequities within the system. The President's Commission on Excellence in Special Education (2002) made a formal recommendation that RtI be put into practice so that students could be identified based on intervention progress. With the significant increase in students' being identified for special education in later grades (e.g., a 38% increase from 1991-2001; Lyon et al., 2001), RtI's early-intervention and assessment model can help school districts address this issue. Marston, Muyskens, Lau, Canter (2003) found that by providing intervention programming based on student need and by monitoring students' progress, the number of students identified for characteristics of having a learning disability remained constant. Bollman, Silberglitt, and Gibbons (2007) found that RtI rendered an actual decline in special education placement rates from 4.5% to 2.5% over a 10-year period. Addressing students' learning challenges through research-based classroom instruction and practices and student-focused intervention programming helped reverse the trend of increasing numbers of students placed in special education.
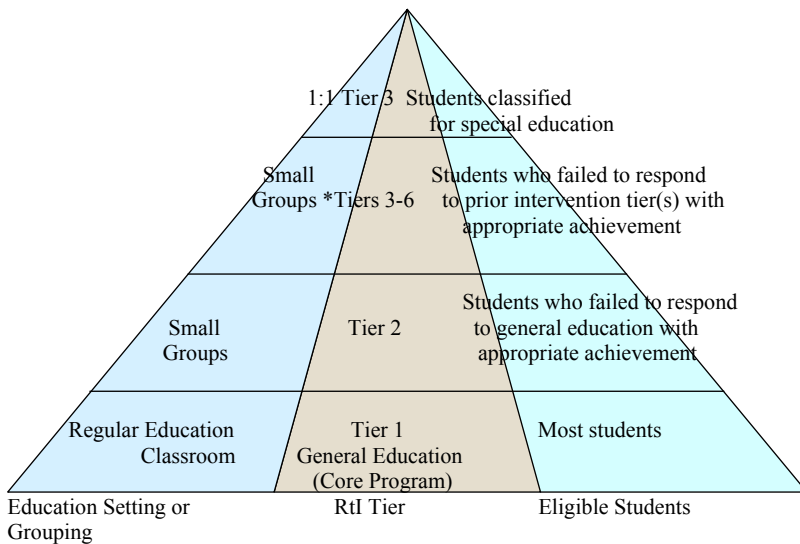
In practice, RtI as a format for pre-referral intervention and special education assessment has had a relatively short history (Bradley, Danielson, & Doolittle, 2007). The Heartland Education Association (Iowa) school district implemented an RtI model in 1985. Minneapolis Public Schools, Ohio, and Pennsylvania initiated RtI models for learning disability (LD) assessment in the early 1990s (Fuchs, Mock, Morgan, & Young 2003). All fifty U.S. states have implemented RtI (Berkeley, Bender, Peaster, & Saunders, 2009). Schools in Vancouver, British Columbia, Canada, have employed the RtI model. A Government of Nova Scotia report (Aylward, Farmer, & MacDonald, 2007) has also encouraged the implementation of the RtI paradigm. The growing prevalence of RtI implementation is indicative of its promotion in federal legislation (i.e., IDEA, 2004) and of educators' seeing value in an intervention-based assessment model (Haager, Klingner, & Vaughn, 2007; Jimerson, Burns, & VanDerheyden, 2007). Students who find academic skills challenging are not only assessed but also receive programming aimed at addressing their areas of difficulty in the intervention/assessment process.

Generic Components of an RtI Model

RtI's model offers consideration of a student as early as kindergarten based on the student's level of responsiveness to increasing-intensive interventions (Bradley et al., 2007; National Association of State Directors of Special Education, 2005). Instead of using just standardized intelligence and academic achievement tests, students

are assessed periodically on their performance with curriculum-based measures (e.g., the number of words read correctly in a text) (Deno, 2003). In the first of three RtI tiers (see Figure 1), students participate in presumably research-based reading instruction activities in the regular education classroom which represent those used with students generally across the nation (L. S. Fuchs & D. Fuchs, 2007a). Each student's rate of reading growth is evaluated about three times per year (e.g., September, January, and April)-referred to as "universal screening." A general education teacher would have all students in the class complete short assessments of reading skills such as decoding, fluency, and comprehension. The aim is to attain a quick overview of students' reading proficiency. The Dynamic Indicators of Basic Early Literacy Skills (DIBELS, 2007) is one of the often-cited and most used examples. Following students' completion of each of the universal screening measures, the teacher would input scores into an online database and then attain a classification of each child's ability levels as being either at grade level, some risk, or at risk (very low ability). Students listed as "some risk" would benefit from some additional practice. Children classified as "at risk" would demonstrate skill levels noticeably discrepant from grade-level peers.

Figure 1. **RtI Model based on Fuchs & Fuchs (2007)**

Education Setting or Grouping	RtI Tier	Eligible Students
	1:1 Tier 3	Students classified for special education
Small Groups *Tiers 3-6		Students who failed to respond to prior intervention tier(s) with appropriate achievement
Small Groups	Tier 2	Students who failed to respond to general education with appropriate achievement
Regular Education Classroom	Tier 1 General Education (Core Program)	Most students

*Indicated but not recommended by Fuchs & Fuchs (2007)

Note: Cited from Dunn, M., & Mabry, L. (in press). Voices from the field: Practitioners' perspectives on response-to-intervention implementation. Journal of School Connections, 3(1).

Researchers have proposed various terms and methods for conceptualizing students' lack of improvement over time (see D. Fuchs, L. S Fuchs, & Compton, 2004). One example is dual discrepancy—a student's demonstrating low academic ability and little or no progress over time. Various operationalized definitions have been

proposed as to when students should no longer be considered as having a dual discrepancy. For students who score in the bottom 20% on a measure of academic skills in reading, writing, or math, two examples of no longer having a *dual discrepancy* are (1) demonstrating an increase in skills "just above baseline," or (2) actually attaining the goal line of normally achieving peers (see D. Fuchs et al., 2004). As a conceptual model, RtI does not define one quantitative formula for measuring (1) the time when a student is initially dually discrepant and needing an intervention, (2) defining what the intervention should entail, (3) clarifying when sufficient progress has been made resulting in the student no longer having a dual discrepancy, or (4) what the criteria for special education classification should be. Schools and districts have the choice of defining their own criteria or even employing criteria on a case-by-case student basis. Once a school team has decided that their given definition of dual discrepancy has been met, the student would move to the second tier in the RtI process to participate in an intensive small-group intervention format with the aim of improving reading skills (Gresham, 2002).

Three formats exist for providing a tier-two intervention for students who have been deemed as having a dual discrepancy: (1) standard protocol, (2) problem solving, and (3) a standard-protocol/problem-solving hybrid (Fuchs et al., 2003).

STANDARD-PROTOCOL APPROACH

In a *standard-protocol approach*, educators are trained in strategies to address a particular academic skill, such as reading. Vellutino, Scanlon, Small, and Fanuele (2006) completed a randomized control group study of 1,373 children from kindergarten to the end of third grade. For the project's treatment group, certified teachers trained by project staff provided small-group interventions (2-3 students, twice a week, 30 minutes per session) to low-achieving students. The results indicated that 84% of the at-risk children performed in the average range by the end of third grade on literacy measures. Intervention as early as kindergarten can efficiently and economically prevent many children from having long-term reading difficulties.

Reading-skills interventions are often provided during the language arts period of the school day (Tomlinson, 2001). Once the teacher has introduced the lesson or arranged students to be working in small groups, children who need intervention programming would gather at a work station in the classroom or go join their group in another area of the school. Students' improvement with the target-skill(s) of the intervention would be assessed at least once a week using curriculum-based measures (CBM) Fuchs & Deschler, 2008; M. K. Hosp, J. L. Hosp, & Howell, 2007). Using reading decoding as an example, the intervention provider would have the student read a slightly challenging text of about 100 words; the intervention provider would then tabulate the number of words read correctly within one minute. This score would be charted on a graph to illustrate the student's change in skill level over time. This assessment method can also be used in other intervention formats.

THE PROBLEM-SOLVING MODEL

The *problem-solving model* offers students a student-focused intervention based on individual need (Fuchs et al., 2003). The general education teacher would presumably try some initial accommodations to address the area(s) of concern. For

students who demonstrate ongoing dually discrepant skills, the teacher would ask to attend a school intervention team meeting where other teachers, administrators, and special education support personnel could dialogue about the student's universal-screening data with the aim of planning an intervention's components and timeline.

The teacher would then provide the intervention to the student and collect weekly progress-monitoring data; a trained assistant may perform this role in or outside of the classroom. At the end of the intervention timeline, the teacher would report the findings to the school team. If the student demonstrated improvement with the intervention, the child could return to regular classroom programming; if not, the school team could design an alternative intervention and timeline. The school team and teacher could continue this cycle depending on how the student responds to the intervention(s). Each school team would define their own number of intervention phases before initiating consideration for long-term special education services. In terms of a research base, the nearest example of a problem-solving intervention format where each lesson is designed to the needs of the individual student would be Reading Recovery (Clay; 1993). The Institute of Education Sciences (2007) completed a thorough examination of the literature and concluded that the program should be listed on its *What Works Clearinghouse* website (http://ies.ed.gov/ncee/wwc/); the author will discuss this more in a later section. While RR provides a guide for an intervention's length (e.g., 12-20 weeks), RtI has no universally-accepted timeline.

For recursive and increasingly intensive interventions in an RtI model, the author prefers the timeline examples of the Tigard-Tualitin School District in the Portland, Oregon area (see http://www.ttsd.k12.or.us/district/student-services/orrti/handouts/ld-evaluation-eligibility); this district provides a dual-discrepancy framework which clarifies when students should be considered for more intensive programming or special education identification based on the degree of progress, intervention-group size , and length of intervention sessions (e.g., 20-25 sessions, thirty-to-fifty minutes per session). For example, if a student persists in being dually discrepant (i.e., below the 20th percentile) following two increasingly-intensive interventions (i.e., more time and/or fewer students per group), the district would view the student as likely to have a learning disability. Conversely, if sufficient progress does occur with the intervention (second tier of RtI), the student returns to the regular classroom program and is no longer viewed as dually discrepant.

THE STANDARD-PROTOCOL/PROBLEM-SOLVING HYBRID MODEL

The *standard-protocol/problem-solving hybrid model* begins with a standard-protocol intervention (small group) and continues, if needed, with additional individual-student sessions using the problem-solving model (Callender, 2007). To encourage inclusion-type programming, the teacher could be the director of the intervention, but districts may provide the teacher with an assistant to support the intervention's implementation. Schools may group students within classrooms or across classrooms according to students' ability levels; some schools have non-classroom teachers (e.g., librarians) working with students who need intervention programming. Nunn and Callender's (2005) findings from a 2002-2005 evaluation of Idaho's *Results Based Model* demonstrated a 3% decrease in special education placements using a hybrid RtI model.

Should the student not make good progress in a Tier 2 intervention(s), the school team may ask for an alternative Tier 3 intervention. Some researchers (e.g., Fuchs & Kearns, 2008) have suggested that this be an academic-skills intervention with cognitive-skills programming to address processing deficits such as poor memory and inattention; for example. Computer software such as *Challenging our Minds* (http://www.challenging-our-minds.com/) offers students the opportunity to improve these cognitive skills. Bracy, Oakes, Cooper, Watkins, Watkins, Brown, et al. (1999) found that in their study of seventh- and eighth-grade students (N=80), the experimental group using the software program significantly increased their intellectual functioning; no significant pre- to post-test difference was found for the control group's mean scores during the 35 sessions/nine-week study. These findings suggest that components of IQ testing may help inform appropriate content for cognitive-skills intervention and long-term remedial programming. The school team may seek parental consent to complete cognitive assessments with the student to help inform intervention programming as well as the child's possible classification as having reading difficulties (RD); about 80% of students with LD have them in the area of reading/writing as opposed to mathematics (Gersten, Fuchs, Williams, & Baker, 2001).

The Option of Changing the Practice of Labelling

While IDEA (2004) defines RD and LD officially as respectively reading and learning *disabilities*, some models of RtI discontinue the practice of using specific labels for identification. Pennsylvania's RtI model, for example, uses the phrase, "Students Needing Alternative Programming" (SNAPs) (Fuchs et al., 2003, p. 165). Because RtI offers students interventions along a continuum from early intervention to long-term programming, students with similar and persistent reading difficulties no longer need to be classified with a disability label to have their needs addressed.

As school districts consider what type of RtI model to implement, it is helpful to reflect on interventions currently in practice in schools, such as RR, and how they could be part of an RtI model.

Contribution of This Practitioner-Based Model To RtI Research

This study expands the practice of RtI in four ways. First, no other models of RtI using RR have previously been offered. Second, unlike many RtI studies which focus only on an intervention in RtI's second tier, this article discusses RR within a comprehensive RtI format from tiers one to three for determining reading difficulties (RD). Third, this author offers complementary RtI programming and assessment ideas that could help promote students' improvement with reading skills. Fourth, this RtI model addresses key RtI questions such as, What is the intervention's timeline? Is the intervention research/evidence based? and What is the cut-off score for determining success with the intervention?

Reading Recovery: A First-Grade Literacy Intervention

In the 1970s, Marie Clay created Reading Recovery. As a school psychologist working with classroom teachers, she was often confronted with educators who voiced their concern about students who were not making sufficient progress with literacy skills in the early-elementary years; yet there was no targeted intervention to

address this need. Clay decided to make this the topic of her doctoral dissertation at the University of New Zealand. The result was the remedial program now known as RR which is used in Canada, the United Kingdom, Australia, New Zealand, and 6,954 United States schools (National Data Evaluation Center, 2008).

RR contains a series of 30-minute lessons and strategies for a first-grade student to complete with a trained teacher (Clay, 2005); each intervention phase (three per year) is referred to as a "round." Each round has a duration of 12- to 20-weeks depending on the chosen format of a school district (National Data Evaluation Center, 2008). RR teachers choose round participants through consultation with kindergarten and first-grade teachers during the first few weeks of first grade. Following attainment of parental consent, students begin participating in the RR Program. First, RR teachers complete some initial observations of the student's reading strategies which determine their beginning level of reading ability.

The RR Program uses a variety of author/publisher books in its series of book levels defined as A and B (kindergarten), and 1-30; book level 30 being a third-grade ability-level text. With these books, RR teachers then offer students a series of reading tasks in which strategies are used and developed with the aim of improving the student's reading skills. The program does not, for example, use scripted worksheets to develop phonemic awareness, sound symbol, blending, patterns, and sight words practice; rather, the RR teacher practices these skills through teaching moments as the student demonstrates difficulty while reading the leveled texts. Running Record assessments are also completed daily to note students' reading behaviors and types of difficulties such as visual, semantic, and meaning. RR would fit RtI's problem-solving model, given that each day's intervention lesson is based on the student's need as defined from assessment data completed the previous day.

At the end of a first-grade student's participation in the RR Program, the RR Teacher reviews the participant's progress in reading skills (Clay, 2005). The RR Teacher determines whether the student is successful (discontinued) by achieving the RR book level/average class level of ability or unsuccessful (continued) indicating that further RR sessions may help the student to attain the desired standard of success. If the student does not make sufficient progress, a referral can be made for consideration for special education. RR fits the problem-solving method of RtI, given its student-focused format for improving literacy skills. The literacy-intervention program also addresses two debated components of RtI: How long should an intervention last? and How should progress beyond dual discrepancy be defined? The program defines a timeline of 12-20 weeks (or more for students with persistent difficulties) and a cut-off score of RR book level 15 representing the end of first-grade reading ability by the end of the school year (Burroughs-Lange & Douëtil, 2007; Lose et al, 2007).

Dunn (2007) analyzed RR assessment components (e.g., beginning text level, ending text level, number of weeks) of first-grade RR student participants (N=155) in a midwestern state to determine which components were significant predictors of students who were later identified as having an RD by third to fifth grade. The results indicated that although ending text level and number of weeks in RR were significant predictors of RD status, they accounted for only 15% of the variance. One assessment or intervention may not address the multifaceted aspect of reading,

the demands of which change as children progress through school (Shaywitz, 2003). Clay (1993) herself commented that even for students who perform well in the RR Program, "Some of them remain at-risk children" (p. 59). RR's ending text level and number of weeks could be a factor in determining which students could possibly be identified as having an RD, but other complementary assessments would help to make a more definitive decision.

Is RR Sufficiently Research Based to Warrant it as a Component in an RtI Model?

Many reviews of RR's effectiveness have been conducted. The most recent discussion stems from the United States Institute of Education Sciences' (IES) 2007 decision, based on their analysis of existing research, to list RR as a research-based literacy program on the *What Works Clearinghouse* website (http://ies.ed.gov/ncee/wwc/). IES concluded that, "RR was found to have positive effects on students' alphabetic and general reading achievement outcomes. The program was found to have potentially positive effects on comprehension and fluency" (*Intervention: Reading Recovery*, 2007).

Agostino and Murphy (2004) completed a meta-analysis of 36 studies about RR. Effect sizes were computed by (1) outcome type (standardized achievement test and Observation Survey outcome measures), (2) comparison-group students (students who also struggle with literacy skills or "regular" students), (3) treatment-group type (discontinued, continued, and all students combined), and (4) test time (i.e., pre, post, or second-grade follow-up). Because not all 36 studies reported pre- and post-test scores for RR and comparison groups, Agostino and Murphy completed a second analysis of the 11 studies which included this data. The results indicated that RR effect sizes for both discontinued and continued students on RR assessments were as large as 1.04 and that standardized achievement measures were as large as 0.66; there was a lasting program effect by the end of second grade and beyond.

Criticisms of the Use of Reading Recovery

Concerns about RR focus on three themes. First, having one certified teacher work with one student for thirty minutes per day over 12-20 weeks has provoked questions about the cost effectiveness of RR (Dyer, 1992; Rasinski, 1995). Pinnell, Lyons, DeFord, Bryk, and Seltzer (1994) completed a statewide assessment of RR in ten Ohio Schools about students' reading improvement scores in RR as compared to three other programs (Reading Success, Direct Instruction Skills Plan, and Reading and Writing Group). Reading Success used RR components in a one-student to one-teacher format; teacher training was shorter in comparison to RR.

TThe Direct Instruction Skills Plan (Cooter & Reutzel, 1987) provided individual instruction to students in a direct-instruction format for "letters and sounds, words, text-level strategies such as sequencing, filling in the blanks, answering questions, as well as reading extended texts" (Pinnell et al., 1994). The Reading and Writing Group used the RR components but with small groups of children. At the end of the study, the RR students' final scores were higher than those of the control groups.

Rasinski (1995) disagreed with Pinnell et al.'s finding. With students in RR receiving individual instruction and comparatively more instructional time as

compared to one teacher for small groups of children as in the Reading and Writing Group in Pinnell et al's study, Rasinski calculated that the RR students' gains were minimal—as little as 4.3%, for example. However, if we consider each student as unique in terms of their academic profile and rate of learning, a one-teacher to one-student approach is desirable so as to maintain the level of intensive instruction required to meet the needs of each individual student before formal identification with a reading difficulty (RD).

A second concern is RR's top-down approach to helping students improve their reading and writing skills. In lieu of providing explicit drills with phonemic awareness, blending, and sight words, for example, RR Teachers teach these skills intermittently as the student demonstrates difficulty. Chapman, Tunmer, and Prochnow (2001), for example, viewed the program as having the student focus on oral reading and comprehension of text, the ultimate goal of reading, before actually working on the fundamental aspects of reading through explicit instruction in phonemic and phonological awareness. Supporters of RR responded that RR does offer these skills on a daily basis through working with words and writing text (Fountas & Pinnell, 1999). To address this issue prior to or concurrently with RR instruction, the general education teacher could help reinforce these skills by providing students short periods of computer-based instruction such as *Earobics* (http://www.earobics. com/solutions/tour _software.php) or *Intellitools Classroom Suite for Phonemic Awareness* (http://store.cambiumlearning.com/ Resources/Video/html/ intellitools.html?site=itc) in the classroom. Johnston (1998) contended that having this type of ongoing dialogue between RR and general education teachers about students' progress and appropriate academic programming demonstrated good professional practice.

A third area of discussion about RR is whether students maintain gains over time. Pinnell, et al.'s (1994) study discussed previously found that RR students maintained their gains into second grade. Askew et al. (2002) gathered data on 116 Reading Recovery students and 129 random sample children in first grade and fourth grade in 45 schools. Based on comparison scores of the Gates-MacGinitie Reading Test (W. H. MacGinitie & R. K. MacGinitie, 1989), the Texas Assessment of Academic Skills (since 2003, known as the *Texas Assessment of Knowledge and Skills* [http://www.texasprojectfirst.org/TAKS.html]), and a classroom teacher questionnaire, the results demonstrated that the RR participants maintained gains into fourth grade. These findings exemplify RR's evidence base.

For students who do not progress with general education classroom instruction, RR can promote students' progress with literacy skills and can be a component within a problem-solving RtI framework. Given that students who enter RR have not been successful in regular education instruction (Tier 1 of RtI), a review of Tier 1 components can provide insight about the RtI model and what should precede Tiers 2 and 3 programming.

TIER 1 OF RtI: EFFECTIVE GENERAL EDUCATION CLASSROOM LITERACY INSTRUCTION

The first tier of the RtI model focuses on general education classroom instruction. Although an at-length explanation of effective general education literacy instruction is beyond the scope of this article, highlighting some of the components will help define this author's suggested comprehensive RtI model that includes RR.

The National Institute of Child Health and Human Development (2000) and the National Research Council (1998) have conducted extensive reviews of what should be included in general education classroom reading instruction: phonemic aware-ness and phonemic decoding skills, fluency in word recognition and text processing, construction of meaning, vocabulary, spelling, and writing. These aspects of read-ing instruction benefit all students; the difference for students with characteristics of having an RD is that they need more intense and explicit instruction in these ele-ments (Foorman, 2007; Foorman & Torgensen, 2001)

With research/evidence-based instruction in general education classrooms, RtI uses periodic universal screening assessments to track students' progress with academic skills and content (L. S Fuchs & D. Fuchs, 2007a). RtI considers students in the bottom 20% following Tier 1 classroom instruction as candidates for a Tier 2 intervention; RR uses this 20% guide as a means to define which students should be considered for participation in the program (Clay, 2005). In the area of literacy, a research-validated universal screening measure used in many districts is the Dynamic Indicators of Basic Early Literacy Skills (DIBELS, 2007; Good et al., 2004). Teachers assess individual students with subtests such as phoneme segmentation fluency, letter naming fluency, and oral reading fluency. This type of assessment would provide an indication of students' skills in reading and identify which students are at risk.

Having completed universal screening data, general education teachers should then reflect on what they can do to supplement or alter classroom instruc-tion so as to help students with low universal screening scores improve (R. Dunn, K. Dunn, & Price, 1984; Gresham, 2002). Classroom practices may need to be changed to provide opportunities for reading and writing skills improvement in small groups. Grade-level teachers may ask building administrators for new reading curriculums to be purchased. School personnel can also review general education classroom in-struction to make recommendations. Employing classroom practices which address students' varying learning styles (i.e., visual, auditory, kinesthetic/tactile) would be one example (Gardner, 2000).

If the conclusion is that these changes in classroom programming/instruc-tion are not sufficient to address the students' low literacy skills, consideration by the school team for more intensive programming (e.g., RR) should be considered. Wilkinson, Ortiz, Robertson, and Kushner (2006) suggest that school teams review students' data from multiple sources (e.g., universal screening assessments, students' records from past school years, attendance) and define specific questions that should be addressed in terms of academic programming and possible later consideration for RD classification.

TIER 2: SMALL-GROUP PROGRAMMING FOR STUDENTS WITH PERSISTENT READING DIFFICULTIES

For Tier 2 programming, researchers have suggested group sizes from one (L. S. Fuchs & D. Fuchs, 2007b, p. 34) to five students (Blachman, Ball, Black, & Tan-gel, 2000), but most educators do not recommend individual-student instruction at this point in the RtI continuum of programming (Harn, Kame'enui, & Simmons, 2007). Based on a multi-student participant model for Tier 2, RR would need to change its format so as to include two or more students in the program. Iversen,

Tunmer, and Chapman (2005) explored this idea and found that the program could be adapted to include pairs of students without compromising the integrity of the lesson. For schools aiming to address the needs of their dually-discrepant students, such a change would be appealing in that more students could potentially benefit. However, to RR advocates (e.g., Clay, 2005; Pinnell et al., 1994), compromising the one-teacher to one-student requirement of the program would render the intervention as no longer being RR.

If Tier 2 is to be small-group instruction, the one-teacher to one-student RR program would better fit as a Tier 3 intervention—the format preferred by this author. Similar to the discussion of how many students should participate in Tier 2 small-group instruction, researchers disagree as to what Tier 3 programming should be. L. S. Fuchs and D. Fuchs (2007a) suggested that Tier 2 represent only the intervention phase of RtI prior to formal identification in Tier 3 with special education programming. Conversely, Burns, Deno, and Jimerson (2007) advocated that Tier 3 provide even more intensive intervention before consideration for placement in special education. "Intensive individualized interventions [should] be explored until some individual or combination of interventions leads to student success" (p. 435). RR could help fulfill this purpose.

TIER THREE: INDIVIDUAL-STUDENT INTERVENTION AND CLASSIFICATION OF STUDENTS WITH PERSISTENT READING DIFFICULTIES

Individual Intervention. For students who persist in having a dual discrepancy following their Tier 2 intervention, the RR Program could fit the definition of a Tier 3 problem-solving intervention to help dually-discrepant students improve. Following a referral from past teachers and from the school team and parental permission, students would read books, practice strategies, write text, practice phonemic and phonological awareness, and complete an assessment of their reading skills (i.e., Running Record) which would inform the RR teacher as to what instruction is needed in the lessons that follow. A calculation of the accuracy rate of the number of words read correctly each day, for example, would represent curriculum-based measurement data. With this information, students' progress with the content of the instructional program can be monitored over time and yield data complementary to traditional psychometric approaches (Thurman & McGrawth, 2008).

Success with the RR intervention would be defined as a student's reading a leveled text representative of the end of the student's round during first grade. For example, a student in round three (the last semester/quarter of the academic year) would be required to read at least book level 15 with a 90% accuracy rate in order to have attained the cut-off score of success with the RR intervention. RR complements the RtI model by having a means to define students who have succeeded versus those who have not (i.e., book levels); students who are unsuccessful may be offered additional sessions to help improve their reading skills. However, not attaining book level 15 is insufficient as a basis for classification of a student as having an RD. Other assessment factors would need to be incorporated into Tier 3 of an RtI model which uses RR.

Complementary curriculum-based measures would be helpful (L. S. Fuchs & D. Fuchs, 2007b). Periodically assessing (e.g., weekly) the five big ideas of literacy (phonemic awareness, alphabetic principle, fluency with text, vocabulary, and com-

prehension [Big Ideas in Beginning Reading, 2004; National Institute of Child Health and Human Development, 2000]) during each round in the RR Program would provide comprehensive assessments of students' growth in literacy skills as well as their progress through the program. For example, phonemic awareness refers to the individual sounds letters make within words (Catts & Kamhi, 2005). The RR Teacher could have a photocopy of a text at the student's current reading text level and choose words with two or three phonemes that the student must identify in a word: cat is made up of /k/ /a/ /t/. The student's score would be represented by the number of correctly identified phonetically decoded words. The *rate of learning* could also be calculated: phonemic awareness score prior to the RR intervention *minus* phonemic awareness score following the RR intervention *divided by* the number of intervention sessions. Similar measures could be calculated for the other big ideas of literacy.

Vellutino et al. (1996) provided individual intervention programming to students in their study. The authors trained a group of certified teachers to provide individual tutoring to first and second grade students with low reading skills. For students who were not making good progress, additional intervention sessions were provided. Students who remained below the thirtieth percentile on the Woodcock Reading Mastery Test-Revised (Woodcock, 1987) following the intervention were defined as "difficult to remediate." This author suggests that students who participate in RR and do not attain the cut-off score of success (e.g., book level 15) at the end of the intervention phase could then be considered by the school team for follow-up (i.e., continued) sessions following an alternate intervention (see Figure 2).

To address processing deficits such as poor memory or inattention, D. Fuchs and Kearn's (2008) suggestion to offer cognitive-skills intervention could be an intermediary step before considering official learning disability classification. Students could practice memory and attentional skills with the *Challenging our Minds* website at a workstation in the classroom. If the student demonstrates progress with this activity, this could help address the dual-discrepancy issue. Depending on the nature and degree of the student's improvement, the school team may recommend additional RR sessions or an alternative academic intervention; if sufficient improvement is made (i.e., reading book level 15 with 90% accuracy), the student could return to Tier 1/general education classroom programming. Alternatively, little or no academic growth following a cognitive-skills intervention would suggest a need for official RD classification.

Assessment and Classification of Students. RtI's Tier 3 may include more explicit assessments to help inform a school team's decision about identifying the student with a reading difficulty (RD). Traditionally, the wait-to-fail model of assessing for RD used a difference of 15 to 23 points or more between an intelligence and academic achievement test (Frankenberger & Fronzaglio, 1993). As stated earlier, many educators and researchers currently disagree with the use of IQ for RD classification (e.g., Francis et al., 2005). Intelligence tests are more a measure of what a student has already learned than being predictive of what the student can learn in the future (Siegel, 1999). It is a paradox that a student with characteristics of an RD who has struggled with reading and literacy skills would be administered an intelligence test, given that the test's questions include tasks directly related to learning to read such as memory and definitions of words. Students from

Figure 2. **First-Grade Reading Recovery/Response to Intervention Logic Map**
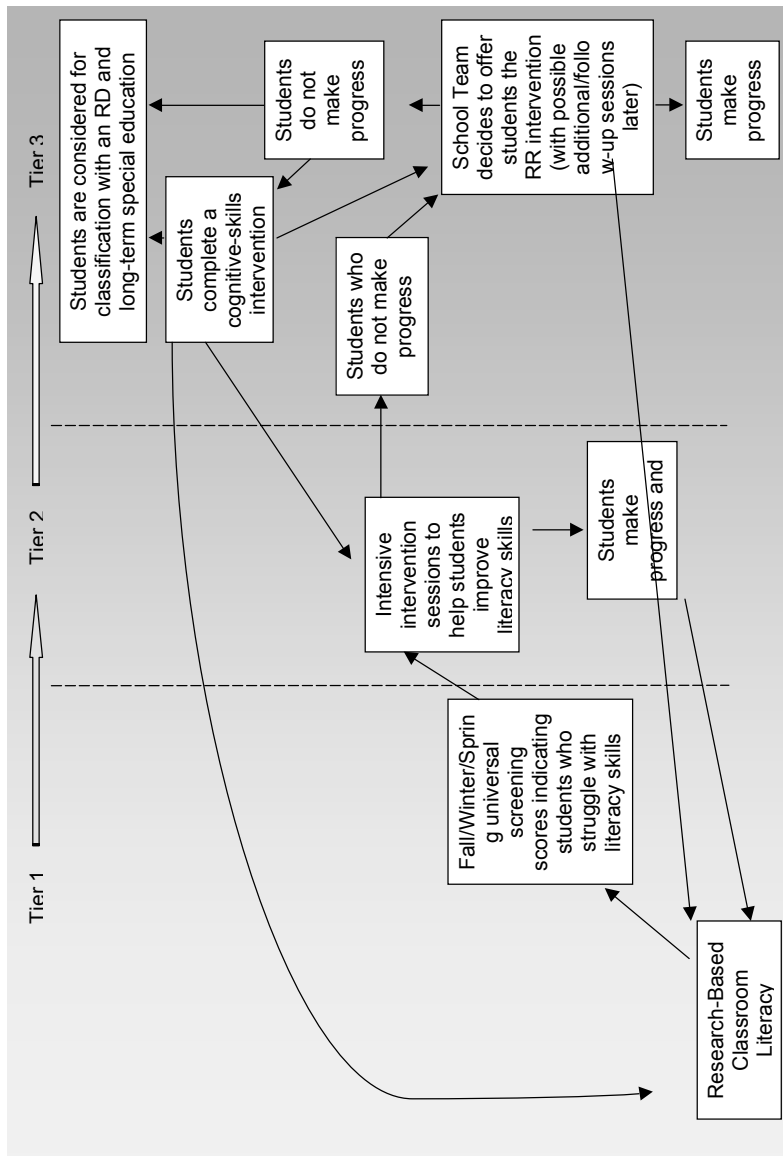
diverse populations are also at a disadvantage, given that school classroom practices and IQ tests are premised on students having foundational language skills as demonstrated by the middle-class, White majority (Blair & Scott, 2002; Lawson et al, 2002; Reschly, 2002). Furthermore, IQ tests can be poor predictors of those students who would benefit from remediation (Kershner, 1990; Vellutino et al., 2006). However, as RtI becomes more widely implemented and research continues, the initial criticisms of using standardized assessments such as IQ in RD identification are not always confirmed.

Fuchs and Young (2006) completed a review of studies where IQ was used to predict responsiveness to a reading intervention; they found that intelligence was a good predictor for older students provided with a reading comprehension intervention but less of a consistent predictor for younger students participating in a phonological awareness intervention. Dunn (2010) found that IQ was significantly different between RD and non-RD groups when students were classified in four ways: IQ/achievement discrepancy method, reading composite score <30, <23, and <15. Given these conflicting research findings, it would seem inappropriate to completely discount a measure of IQ—especially since RtI has yet to be empirically determined as a more effective method of determining students with learning difficulties (LD) (Kavale Holdnack, & Mostert, 2006; Kavale, Kauffman, Bachmeier, & LeFever, 2008). This author's suggested use of IQ in an RR/RtI model would not be the deciding factor but a complementary component within a variety of LD assessment data.

Mather (2007) argued that without a measure of intellectual potential, a different type of student will result in being classified as having an LD—e.g., slow learners, who have not been traditionally eligible for LD identification, given that they did not have a discrepancy between potential and academic achievement. Kavale et al. (2006) also expressed concern about using an assessment model like RtI without including a measure of potential (IQ), given that this remains part of the U.S. federal definition of LD (U.S. Office of Education, 1977).

Flanagan, Ortiz, Alfonso, and Mascolo (2002) suggested cognitive and academic assessments which could be incorporated into an RR/RtI model. Following informal observation and pre-referral intervention (such as RR), students who are not progressing with reading skills (e.g., not attaining book level 15 by the end of first grade) would complete a comprehensive assessment in reading/writing, general information, lexical knowledge, oral expression, and listening comprehension. For reading, the student's highest RR book level attained, number of weeks in the program, Running Record assessments, and the RR teacher's observations/notes would provide insight into the student's skills and deficits.

Vellutino et al. (2006) suggested using standardized assessments to complement data collected during the intervention as a means to document students' progress. Fuchs and Young (2006) also favored a multifactorial view of intelligence which can inform appropriate instructional strategies for the development-of-instruction and special-education eligibility process. The Comprehensive Test of Phonological Processing (CTOPP) (Wagner, Torgesen, & Rashotte, 1999) could be completed to document proficiency in reading and measure rapid automatized naming (RAN) of letters and phonetic coding (analysis/synthesis). The Woodcock-Johnson Tests of

Achievement (Woodcock & Johnson, 2001) could be used to assess other reading skills such as comprehension and nonsense-word fluency.

In using this assessment approach, a student's potential would be defined using a range of broad cognitive abilities as opposed to one single IQ test. School teams could consider incorporating this approach into a student's intervention plan and multidisciplinary evaluation. With this data collected and analyzed as well as meeting the criteria of the U.S. federal definition, the school team would then decide whether the student has met the criteria for classification as having an RD.

Conclusion

The RtI model offers promising benefits to students who struggle with literacy skills. In lieu of waiting until third grade or later to have standardized, norm-referenced assessments to define RD eligibility, RtI offers a renewed emphasis on pre-referral intervention and the opportunity to consider data from multiple sources to inform a school team's decision to seek official classification of a student as having an RD. However, with RtI being relatively new, operationalizing the model into practice can pose challenges to districts which are unsure about issues such as what interventions to use, how long of a timeline for the intervention, and what the cut-off score of success for the intervention should be. RR could be a key component of the three-tier RtI model as it addresses these important questions. Defining RD status with RR alone is not acceptable, but components of the program such as ending text level and number of weeks, as evidence-based predictors of later RD status Dunn (2007), can help inform school teams' decisions about completing additional assessments and whether to classify a student with an RD. Schools can use RR as a component within a larger problem-solving RtI intervention model.

REFERENCES

Agostino, J. V., & Murphy, J. A. (2004). A meta-analysis of Reading Recovery in United States schools. *Educational Evaluation and Policy Analysis, 26*(1), 26-38.

Askew, B. J., Kaye, E., Frasier, D. E., Mobasher, M., Anderson, N. and Rodríguez, Y. G. (2002). Making a case for prevention in education. *Literacy Teaching and Learning: An International Journal of Early Reading and Writing, 6*(2), 43-73. Reprinted (2003) in S. Forbes & C. Briggs (Eds.), *Research in Reading Recovery, volume two* (pp. 133–158). Portsmouth, NH: Heinemann.

Aylward, M. L., Farmer, W., & MacDonald, M. (2007). *Minister's review of Services for Students with Special Education Needs.* Halifax, Nova Scotia: Crown Copyright, Province of Nova Scotia. Retrieved October 10, 2008, from http://www.ednet.ns.ca/events/special_education_review/documents/review-committee-report-e.pdf

Berkeley, S., Bender, W. N., Peaster, L. G., & Saunders, L. (2009). Implementation of response to intervention: A snapshot of progress. *Journal of Learning Disabilities, 42*(1), 85-95.

Big Ideas in Beginning Reading. (2004). Retrieved June 18, 2008, from http://reading.uoregon.edu/

Blachman, B. A., Ball, E. W., Black, R., & Tangel, D. M. (2000). *Road to the code: A phonological awareness program for young children.* Baltimore: Paul H. Brookes Publishing Co.

Blair, C., & Scott, K. (2002). Proportion of LD placements associated with low socioeconomic status: Evidence for a gradient. *The Journal of Special Education, 36*(1), 14–22.

Bollman, K.A., Silberglitt, B., & Gibbons, K. A. (2007). The St. Croix River education district model: Incorporating systems-level organization and a multi-tiered problem-solving process for intervention delivery. In S. K. Jimerson, M. K. Burns, & A. M. VanDerHeyden (Eds.), *Handbook of response to intervention: The science and practice of assessment and intervention* (pp. 319-330). New York: Springer.

Bradley, R., Danielson, L., & Doolittle, J. (2007). Responsiveness to intervention: 1997 to 2007. *Teaching Exceptional Children, 39*(5), 8-12.

Bracy, O. L., Oakes, A. L., Cooper, R. S., Watkins, D., Watkins, M., Brown, D. E., et al. (1999). The effects of cognitive rehabilitation therapy techniques for enhancing the cognitive/intellectual functioning of seventh- and eighth-grade children. *Cognitive Technology, 4*(1), 19-27. Retrieved January 11, 2009, from http://www.challenging-our-minds.com/tour/CognitiveTechnology.pdf

Burns, M. K., Deno, S. L., & Jimerson, S. R. (2007). Toward a unified response-to-intervention model. In S. R. Jimerson, M. K. Burns, & A. M. VanderHeyden (Eds.), *Handbook of response to intervention: The science and practice of assessment and intervention* (pp. 428-440). New York: Springer.

Burroughs-Lange, S., & Douëtil, J. (2007). Literacy progress of young children from poor urban settings: A Reading Recovery comparison study. *Literacy teaching and Learning, 12*(1), 19-46.

Callender, W. A. (2007). The Idaho results-based model: Implementing response to intervention statewide. In S. R. Jimerson, M. K. Burns, & A. M. VanderHeyden (Eds.), *Handbook of response to intervention: The science and practice of assessment and intervention* (pp. 331-342). New York: Springer.

Catts, H., & Kamhi, A.. (2005). *Language and reading disabilities.* Second Edition. Boston: Pearson.

Chapman, J. W., Tunmer, W. E., & Prochnow, J. E. (2001). Does success in the Reading Recovery program depend on developing proficiency in phonological-processing skills? A longitudinal study in a whole language instructional context. *Scientific Studies of Reading, 5*(2), 141-176.

Clay, M. (2005). *Literacy lessons designed for individuals.* Portsmouth, NH: Heinemann.

Clay, M. (1993). *Reading Recovery: A guidebook for teachers in training.* Portsmouth, NH: Heinemann.

Cooter, R. B. Jr., & Reutzel, D .R. (1987). Teaching reading skills for mastery. *Academic Therapy, 23*, 127-134.

Deno, S. L. (2003). Developments in curriculum-based measurement. *The Journal of Special Education, 37*(3) , 184-192.

DIBELS (*Dynamic indicators of basic early literacy skills*). (2007). Retrieved June 18, 2008, from http://dibels.uoregon.edu/index.php

Dunn, M. W. (2010). Defining Reading Disability: Do IQ and Reading Composite Scores have anything significant to say? Manuscript under review.

Dunn, M. W. (2007). Diagnosing reading disability: Reading Recovery as a component of a response to intervention assessment method. *Learning Disabilities: A Contemporary Journal, 5*(2), 31-47.

Dunn, R., Dunn, K., & Price, G. E. (1984). *Learning style inventory.* Lawrence, KS: Price Systems.

Dyer, P. C. (1992). Reading Recovery: A cost-effectiveness and educational-outcomes analysis. *ERS Spectrum, 10*, 10-19.

Flanagan, D., Ortiz, S., Alfonso, V., & Mascolo, J. (2002). *The achievement test desk reference (ATDR): Comprehensive assessment and learning disabilities.* Boston: Allyn & Bacon.

Foorman, B. R. (2007). Primary prevention in classroom reading instruction. *Teaching Exceptional Children, 39*(5), 24-30.

Foorman, B. R., & Torgensen, J. K. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research and Practice, 16*(4), 202-211.

Fountas, I. C., & Pinnell, G. S. (1999). How and why children learn about sounds, letters, and words in Reading Recovery lessons. *Running Record, 12*(1), 1-6.

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

Frankenberger, W., & Fronzaglio, K. (1993). The review of states' criteria and procedures for identifying children with learning disabilities. *Journal of Learning Disabilities, 24*(8), 495-500.

Fuchs, D., & Deschler, D. (2008, April 3). *Response to intervention update and current.* Presentation at the Council for Exceptional Children Annual Convention and Expo, Boston, Massachusetts.

Fuchs, L. S., & Fuchs, D. (2007a) A model for implementing responsiveness to intervention. *Teaching Exceptional Children, 39*(5), 14-20.

Fuchs, L. S., & Fuchs, D. (2007b). The role of assessment in the three-tier approach to reading instruction. In D. Haager, J. Klingner, & S Vaughn (Eds.), *Evidence-based reading practices for response to intervention* (pp. 29-42). Baltimore, MD: Paul H. Brookes Publishing Co.

Fuchs, D., Fuchs, L. S., & Compton, D. L. (2004). Identifying reading disabilities by responsiveness-to-intervention: Specifying measures and criteria. *Learning Disability Quarterly, 27*(4), 216-227.

Fuchs, D., & Kearns, D. M. (2008, February 29). *Cognitive assessment in an RtI framework.* Presentation at the Learning Disabilities Association of America Conference, Chicago, Illinois.

Fuchs, D., Mock, D., Morgan, P., & Young, C. (2003). Responsiveness-to-instruction: Definitions, evidence, and implications for learning disabilities construct. *Learning Disabilities Research & Practice, 18* (3), 157–171.

Fuchs, D., & Young, C. L. (2006). On the irrelevance of intelligence in predicting responsiveness to reading instruction. *Exceptional Children, 73*(1), 8-30.

Gardner, H. (2000). *Intelligence Reframed: Multiple Intelligences for the 21st Century.* New York: Basic.

Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research, 71,* 279-320.

Good, R. H., Kaminski, R. A., Shinn, M., Bratten, J., Shinn, M., & Laimon, L., et al. (2004). *Technical adequacy and decision making utility of DIBELS* (Tech. Rep. No. 7). Eugene: University of Oregon.

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

Haager, D., Klingner, J., & Vaughn, S. (2007). *Evidence-based practices for response to intervention.* Baltimore, MD: Paul H. Brookes Publishing Co.

Harn, B. A., Kame'enui, E. J., & Simmons, D. C. (2007). The nature and role of the third tier in a prevention model for kindergarten students. In D. Haager, J. Klingner, & S. Vaughn (Eds.), *Evidence-based reading practices for response to intervention* (pp. 161-184). Baltimore, MD: Paul H. Brookes Publishing Co.

Heller, K. A., Holtzman, W. H., & Messick, S. (Eds.) (1982). *Placing children in special education: A strategy for equity.* Washington, DC: National Academy Press.

Hosp, M. K., Hosp, J. L., Howell, K. W. (2007). *The ABCs of CBM: A practical guide to curriculum-based measurement.* New York: The Guilford Press.

IDEA (Individuals with Disabilities Education Improvement Act of 2004. (2004) Pub. L. No. 108-446, 118 Stat. 2647.

The Institute of Education Sciences. (2007) *Intervention: Reading Recovery.* Retrieved October 10, 2008, from http://ies.ed.gov/ncee/wwc/reports/beginning_reading/reading_recovery/

Iversen, S., Tunmer, W. E., & Chapman, J. W. (2005). The effects of varying group size on the Reading Recovery approach to preventative early intervention. *Journal of Learning Disabilities, 38*(5), 456-472.

Jimerson, S. R., Burns, M. K., & VanDerHeyden, A. M. (2007). *Handbook of response to intervention: The science and practice of assessment and intervention.* New York: Springer.

Johnston, P. (1998). Commentary on a critique. *The Reading Teacher, 51*(4), 282-286.

Kavale, K., & Forness, S. (2000). What learning disability definitions say and don't say: A critical analysis. *Journal of Learning Disabilities, 33,* 239–256.

Kavale, K., Holdnack, J., & Mostert, M. (2006). Responsiveness to intervention and the identification of specific learning disability: A critique and alternative proposal. *Learning Disabilities Quarterly, 29*, 2–16.

Kavale, K. A., Kauffman, J. M., Bachmeier, R. J., & LeFever, G. B. (2008). Response-to-intervention: Separating the rhetoric of self-congratulation from the reality of specific learning disability identification. *Learning Disability Quarterly, 31*(3), 135-150.

Kershner, J. R. (1990). Self-concept and IQ as predictors of remedial success in children with learning disabilities. *Journal of Learning Disabilities, 23*, 368–374.

Lawson, Q., Humphrey, L., Wood-Garnett, S., Fearn, K., Welch, C., Greene-Bryant, B., et al. (2002). *Addressing Over-Representation of African-American Students in Special Education.* Washington, D.C.: Council for Exceptional Children.

Lose, M. K., Schmitt, M. C., Gómez-Bellengé, F. X., Jones, N. K., Honchell, B. A., & Askew, B. J. (2007). *Reading Recovery and IDEA Legislation: Early intervening service (EIS) and response to intervention (RtI).* Retrieved June 18, 2008, from http://readingrecovery.org/pdf/reading_recovery/SPED_Brief-07.pdf

Lyon, G. R., Fletcher, J. M., Shaywitz, S. E., Shaywitz, B. A., Torgensen, J. K., Wood, F. B., et al. (2001). Rethinking learning disabilties. In C. E. Finn, C. R. Hokanson, & A. J. Rotherham (Eds.), *Rethinking special education for a new century*. Washington, D.C.: Thomas B. Fordham Foundation.

MacGinitie, W. H., & MacGinitie, R. K. (1989). *Gates-MacGinitie Reading Tests*. Chicago, IL: Riverside Publishing.

Marston, D., Muyskens, P., Lau, M., &Canter, A. (2003). Problem-Solving model for decision making with high-incidence disabilities: The Minneapolis experience. *Learning Disabilities Research & Practice,18,* 187-200.

Mather, N. (2007, February 15). *Poor response to intervention is not the same as LD*. Conference presentation at the Learning Disabilities Association of America Annual Convention, Pittsburgh, Pennsylvania.

National Association of State Directors of Special Education. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: National Association of State Directors of Special Education.

National Data Evaluation Center. (2008). *Reading Recovery and Descubriendo La Lectura National Report for 2005-2006*. Retrieved October 10, 2008, from http://www.ndec.us/WebDocs/DocumentationTree/Evaluation%20Reports/2006-2007%20Reading%20Recovery%20and%20Descubriendo%20La%20Lectura%20National%20Report.pdf

National Institute of Child Health and Human Development. (2000). *National Reading Panel—Teaching children to read: Reports of the subgroups* (NIH Pub. No. 00-4754). Washington, DC: U.S. Department of Health and Human Services.

National Research Council. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Nunn, G. D., & Callender, W. A. (2005). Results-based model overview presentation and summary of evaluations report. Presented at the National Association of School Psychologist Annual conference, Atlanta, Georgia.

Pinnell, G., Lyons, C., DeFord, D., Bryk, A., & Seltzer, M. (1994). Comparing instructional models for the literacy education of high-risk first graders. *Reading Research Quarterly, 29*(1), 9-39.

President's Commission on Excellence in Special Education. (2002) *A new era: Revitalizing special education for children and their families*. Retrieved October 10, 2008, from http://www.ed.gov/inits/commissionsboards/whspecialeducation/reports/index.html

Rasinski, T. V. (1995). Commentary on the effects of Reading Recovery: A response to Pinnell, Lyons, DeFord, Bryk, and Seltzer. *Reading Research Quarterly, 30*(2), 264-270.

Reschly, D. (2002, February 22). *Disproportional representation in special education*. Presentation to the President's Commission on Excellence in Special Education.

Shaywitz, S. (2003). *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. New York: Vintage Books.

Siegel, L. (1999). Issues in the definition and diagnosis of learning disabilities: A perspective on Guckenberger v. Boston University. *Journal of Learning Disabilities, 32*(4), 304-319.

Thurman, S. K., & McGrawth, M. C. (2008). Environmentally based assessment practices: Viable alternatives to standardized assessment for assessing emergent literacy skills in young children. *Reading and Writing Quarterly, 24*(1), 7-24.

Tomlinson, C. (2001). *How to differentiate instruction in mixed ability classrooms*. Alexandria, VA: Association of Supervision and Curriculum Development.

U.S. Office of Education. (1977, December 29). Assistance to states for education of handicapped children: Procedures for evaluating specific learning disabilities. *Federal Register,* 42(*250*), 65082-65085. Washington, DC: U.S. Government Printing Office.

Vellutino, F., Scanlon, D., Sipay, E., Small, S., Pratt, S., Chen, R., et al. (1996). Cognitive profiles of difficult-to-remediate and readily remediated poor readers: Early intervention as a vehicle for distinguishing between cognitive and experiential deficits as basic causes of specific reading disability. *Journal of Educational Psychology, 88*(4), 601–638.

Vellutino, F. R., Scanlon, D. M., Small, S., & Fanuele, D. P. (2006). Response to intervention as a vehicle for distinguishing between children with and without reading disabilities: Evidence for the role of kindergarten and first-grade interventions. *Journal of Learning Disabilities, 39,*(2), 157-169.

Wagner, R., Torgesen, J., & Rashotte, C. (1999) Comprehensive test of phonological processing. Austin, TX: PRO-ED Publishing.

What works? Reading Recovery. Retrieved October 6, 2008, from http://www.readingrecovery. org/reading_recovery/highlights/index.asp

Wilkinson, C. Y., Ortiz, A. A., Robertson, P. M., Kushner, M. I. (2006). English language learners with reading-related LD: Linking data from multiple sources to make eligibility determinations. Journal of Learning Disabilities, 39(2), 129-141.

Woodcock, R. W. (1987). Woodcock reading mastery tests—revised. Circle Pines, MN: American Guidance Service.

Woodcock, R., & Johnson, M. (2001). Woodcock-Johnson tests of achievement. Itasca, IL: Riverside Publishing.

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