

A Comprehensive Intervention Model for Preventing Reading Failure: A Response to Intervention Process

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Why do some children have difficulty in reading and others do not? We know that good readers use more effective strategies than poor readers. We also know that many problems can arise in the strategic processing of texts. Some students might not possess the necessary background or strategies for solving problems. Or, if they do, they might not understand when to employ the strategy that leads to the most efficient solution. With poor readers, their planning actions might be disorganized, a result of unthinking reactions to the text that could be camouflaged by accurate responses. Some struggling readers might achieve the reading goal by luck or circumstance yet lack the problem-solving strategies to accomplish the goal with efficiency. This is in contrast to strategic readers who make deliberate and intentional choices that are spontaneously monitored by their desire to comprehend the message. Strategic-based interventions, such as Reading Recovery, have shown that struggling readers can acquire efficient strategies for monitoring their comprehension, thus reversing their reading failure (Clay, 1998, 2005).

The current view of learning disabilities, as described by Gersten, Fuchs, Williams, and Baker (2001), states, “inefficiency rather than deficiency most accurately characterizes the problems experienced by students

with learning disabilities” (p. 2). These researchers describe how “the breakdown occurs in the domain of strategic processing and metacognition,” in other words, the “students’ ability to control and manage their cognitive activities in a reflective, purposeful fashion” (p. 2).

For decades, school districts have used a discrepancy model to evaluate students who may have a learning disability. This model assumes that the problem lies within the child, and not in the curriculum or instruction the child is receiving. As a result, many children are overidentified as learning disabled, either because they never received intervention or because of poor classroom instruction (Gersten & Dimino, 2006).

This viewpoint is supported in the Individuals With Disabilities Education Improvement Act of 2004 (IDEA, 2004), which advocates for intervention prior to identification. Under IDEA, a response to intervention (RTI) method is designed to provide struggling readers with appropriate interventions to meet their unique needs. The RTI method is considered a preventive approach for the earlier identification of students with reading difficulties, thus resulting in a decrease in the number of students referred for special education (Lose, 2007).

The purpose of this article is to discuss the Comprehensive Intervention Model (CIM) as an effective RTI method. First, we will present information on early intervening services (EIS) and response to intervention with details on the RTI framework and core components. Then, we will describe how the Comprehensive Intervention Model is an RTI approach, including details for how layers fit within a four-tiered design, followed by a description of the intervention components and research on the model (Center for Literacy, 2007). Finally, we will present a framework for implementing the Comprehensive Intervention Model in a school.

What is Response to Intervention (RTI)?

This section introduces the legislation on EIS and RTI as defined in revisions to the IDEA law. (See <http://idea.ed.gov>). The intention of the law is that all children should receive a research-based intervention prior to referral for special education. The law is the result of congressional concerns that children from particular racial or ethnic backgrounds were being overidentified as children with disabilities or overrepresented in particular educational settings.

The final regulations of the reauthorized IDEA legislation were signed into law on Aug. 14, 2006. The

revisions include EIS, which allow a school to use up to 15 percent of the amount received to develop and implement coordinated EIS for children who are not currently identified as learning disabled. An emphasis is placed on K–3 students, although funds can be used for 4–12 students as well. The funding can also be used to provide professional development in intervention techniques for teachers and other school personnel. However, schools can only use these funds for research-based intervention models that comply with the regulations of the law.

Response to intervention is a comprehensive assessment and intervention process that identifies students at risk and monitors the academic progress of students in the general education curriculum. Therefore, if a school district has more than 20 percent of students in a subgroup who are not successful in reading, the school or district may need to assess the classroom curriculum. This acknowledges that general education is the first line of defense against reading failure. The bottom line is to improve academic achievement of all students through high-quality classroom instruction and research-based interventions.

The law requires that states adopt criteria for determining if a child has a specific learning disability. The criteria must permit the use of a process based on the child's response to intervention. The critical components of RTI are (a) universal screening of students, (b) defining in measurable terms the problem area, (c) collecting baseline data prior to the intervention, and (d) preparing a written plan of intervention, including measures for progress monitoring.

The most common structure for implementing an RTI is a tiered

framework. This provides a process for delivering interventions according to degrees of intensity and teacher expertise. The intensity of each intervention will depend on the individual needs of the student as determined by an intervention team. The typical framework is the three-tiered approach, although some districts use four or more tiers. However, regardless of the number of tiers, the concept is that the student will move to successively more-intense levels if the child fails to show progress at each level (Fuchs & Fuchs, 2006).

We believe that the tiered approach is a positive step for an RTI. Yet, we are concerned that it may present a problem for the most-tangled readers, if they have to wait too long to receive the most-intensive Tier 3 intervention. To illustrate, let's take a look at the typical structure, followed by our version of layers within tiers, which we believe leads to greater acceleration.

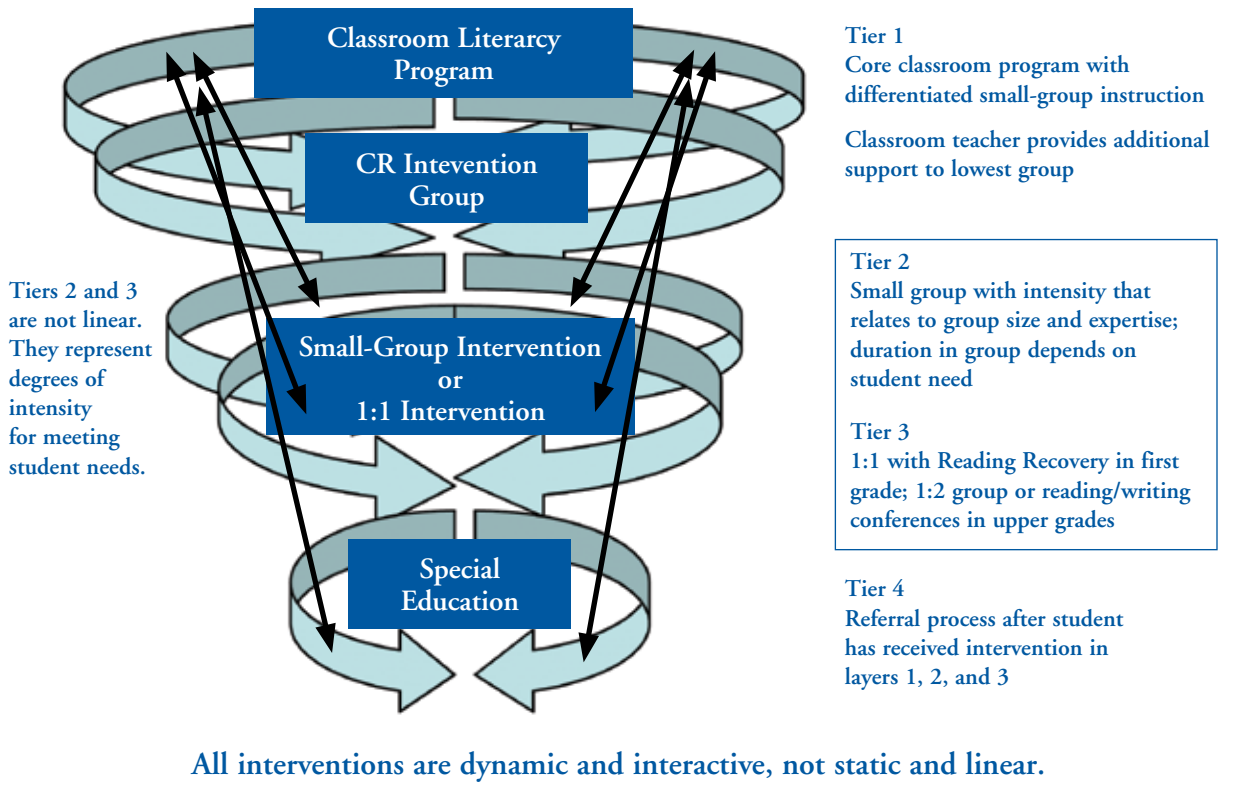
- Tier 1 is the universal or core literacy curriculum and whatever intervention a student would receive within the classroom framework. This tier acknowledges the importance of high-quality classroom literacy programs in meeting the needs of all students. In terms of intensity, all students are typically spending at least 90 minutes a day on the core curriculum, with some built-in interventions and benchmark screenings at beginning, middle, and end of the year. The core instruction should enable 80% of the class to perform at proficiency; if this is not happening, the classroom literacy program should be assessed and redesigned.

- Tier 2 focuses on providing intensive supplemental interventions to small groups of students who are lagging behind their peers in Tier 1. If screening assessments reveal that some students are not responding to Tier 1 classroom interventions, these students are then provided with more-intensive Tier 2 interventions. These interventions are designed to supplement and support classroom instruction, thus providing another level of support for students who need more assistance.
- Tier 3 is the most-intensive intervention, which is specifically targeted to meet the needs of students who have not responded appropriately to Tier 1 and Tier 2 interventions. Tier 3 intervention is typically one-to-one or no more than 1:3 teacher/student ratio. The intensity is also represented in the expertise of the Tier 3 staff, generally an intervention specialist. The essential elements of this level relate to intensity and expertise.

A Closer Look at the Tiered Approach

Since the tiered model is the most common approach for RTI, it seems wise to take a closer look at the underlying concepts within the framework. The dictionary definition of tiered instruction is an 'ordering system.' From an educational point of view, this implies that a reader would need to wait until he had received one intervention tier before moving to the next tier. Our caution with

Figure 1. Dynamic Interventions in a Layered Four-Tiered Framework



this concept is that it could lead to a remediation mindset, in contrast to an accelerated theory. We believe that interventions should be grounded in a sense of urgency, simply because poor readers have three challenges to overcome, and time can be their enemy:

1. Poor readers must unlearn inefficient and inappropriate responses that are preventing them from making literacy progress. Unfortunately, many of these responses have become habituated reactions to problems, thus, interfering with the new learning. The situation can be further exacerbated by inappropriate interventions delivered by unqualified staff.
2. Poor readers must make giant leaps in their learning in order to catch

up with their average peers. This can be an upward struggle for low readers. As classroom instruction improves in quality, the reading levels of average readers may also increase; and the achievement gap between the poor and average reader could actually widen.

3. Poor readers must maintain their gains after the intervention has ceased, often in spite of other social issues that can impact literacy. This implies that struggling readers need sensitive observation and flexible support for at least 1 year beyond the intervention period.

We believe these challenges are realities for most at-risk children. Therefore, an RTI plan would include multiple layers of interven-

tion to promote and sustain reading progress over time. This plan would provide the most intense intervention up front to the hardest-to-teach students and less intensive small-group interventions for other struggling readers, while also ensuring ongoing support, with progress monitoring, for a minimum of 1 year beyond any intervention. Figure 1 illustrates how interventions are positioned within a layered four-tiered framework. It is important to emphasize that Tiers 2 and 3 are not linear or static interventions; rather, they provide a problem-solving framework for selecting the most appropriate intervention to meet the immediate needs of struggling readers. Figure 2 provides an example of how interventions are aligned across classroom, small group, and one-to-one to ensure a seamless

RTI approach. In the next section, we'll describe how these interventions are configured to provide simultaneous support for struggling readers.

Two Waves of Literacy Intervention

Schoolwide intervention designs require unique and well-developed approaches that meet the diverse needs of struggling students, including primary, intermediate, middle, and secondary students. Our RTI model is represented as "Two Waves of Literacy Defense," with the first wave taking a preventive stance with K–3 interventions. The premises of early intervention are logical.

1. Intervene as early as possible before confusions become habituated and unthinking reactions.
2. Provide intensive, short-term services that focus on problem-solving strategies in continuous texts.
3. Make data-driven decisions about the intensity of interventions, the duration period, and the need for follow-up support.

The second wave of literacy defense occurs at the fourth- to twelfth-grade levels. With appropriate interventions, struggling readers in upper grades can become successful readers. However, there are two major challenges to overcome: (a) years of

unproductive reading practices can create resistance, passivity, and lack of motivation; and (b) interventions may take longer to yield positive results. These challenges may require schools to redesign their literacy programs in three significant ways.

1. Create a classroom model of differentiated instruction.
2. Place an emphasis on reading strategies in the content areas.
3. Provide interventions, including small group and one-to-one, for the students who are lagging behind.

Let's take a closer look at each wave, beginning with the elementary grades.

Figure 2. Response to Intervention Plan for Comprehensive Intervention Model

Student _____ Grade _____ Classroom Teacher _____ Date _____

		Degrees of Intensity			
		One-to-One	Small Group	Whole Class	Independent Work
Layers of Support/Expertise	Core Classroom Instruction	<input type="checkbox"/> Reading Conferences <input type="checkbox"/> Writing Conferences	<input type="checkbox"/> Guided Reading <input type="checkbox"/> Literature Discussion <input type="checkbox"/> Reading and Writing Conference	<input type="checkbox"/> Read Aloud <input type="checkbox"/> Shared Reading <input type="checkbox"/> Mini-Lessons <input type="checkbox"/> Share Time	<input type="checkbox"/> Literacy Corners <input type="checkbox"/> Option Board <input type="checkbox"/> Independent Reading <input type="checkbox"/> Independent Writing
	Tier I Classroom Intervention	<input type="checkbox"/> Extra Reading Conferences <input type="checkbox"/> Extra Writing Conferences	Intervention Group <input type="checkbox"/> Emergent Intervention Group <input type="checkbox"/> Guided Reading Plus <input type="checkbox"/> Comprehension Focus Group <input type="checkbox"/> Assisted Writing Group <input type="checkbox"/> Oracy Group	Plan/Monitoring/Duration	
	Tier II Intervention Specialist	<input type="checkbox"/> Extra Reading Conferences <input type="checkbox"/> Extra Writing Conferences	Intervention Group <input type="checkbox"/> Emergent Intervention Group <input type="checkbox"/> Guided Reading Plus <input type="checkbox"/> Comprehension Focus Group <input type="checkbox"/> Assisted Writing <input type="checkbox"/> Oracy Group	Plan/Monitoring/Duration	
	Tier III Intervention Specialist	<input type="checkbox"/> Reading Recovery <input type="checkbox"/> Extra Reading Conferences <input type="checkbox"/> Extra Writing Conferences	Small Group (3 or less) <input type="checkbox"/> Emergent Intervention Group <input type="checkbox"/> Guided Reading Plus Group <input type="checkbox"/> Comprehension Focus Group <input type="checkbox"/> Assisted Writing Group <input type="checkbox"/> Oracy Group	Plan/Monitoring/Duration	
	Tier IV Special Education	<input type="checkbox"/> Extra Reading Conferences <input type="checkbox"/> Extra Writing Conferences	Small Group <input type="checkbox"/> Guided Reading Plus Group <input type="checkbox"/> Comprehension Focus Group <input type="checkbox"/> Assisted Writing Group <input type="checkbox"/> Oracy Group	Plan/Monitoring/Duration	

Reindl, B., & Meyer, K. (2007). *Degrees of intensity in a comprehensive intervention model*. Washington Comprehensive Literacy Charter School, Sheboygan, Wisconsin.



A student's RTI plan includes observations by the English language learners (ELL) specialist during writing workshop, followed by collaborative planning with the classroom teacher. Above, ELL specialist Cindy DeRosa observes a student during a writing conference with Dana Autry, her third-grade teacher, as part of the student's RTI monitoring plan.

The purpose of wave 1 is to increase the overall literacy achievement by the end of third grade and to reduce the number of children identified with learning disabilities within 1.5% or less of the general population. Toward this goal, struggling readers are provided with multiple layers of intervention. To illustrate, at Tier 1, the classroom teacher provides the entire class with a 90-minute literacy core of differentiated instruction: whole group (shared reading, interactive read-aloud, strategy-based minilesson); small group (guided reading, literature discussion, assisted writing); one-to-one (reading and writing conferences); and independent (easy or familiar reading, word study). For struggling readers, the teacher provides an additional classroom intervention, for example, a reading conference or a word study lesson.

Concurrent with Tier 1, the lowest students could also receive a Tier 2 small-group intervention or a Tier 3 one-to-one intervention. In some cases, a student might receive three interventions at the same time. If a student is not progressing at the expected rate, the classroom teacher, in collaboration with the school's intervention team, initiates the referral process for special education. In Tier 4, the special education students continue to receive Tier 1 classroom instruction to meet their literacy needs, and the classroom teacher and special education teacher collaborate on a seamless approach across the two contexts. The expectation is that the special education students will continue to make good progress with the potential to reach literacy proficiency over time.

On the following pages are tables depicting the two waves of literacy defense. In Table 1, we provide a framework for layering interventions in the kindergarten to third-grade levels. In the second wave of literacy defense (Table 2), Tier 1 instruction uses a workshop framework for differentiating instruction, including small groups and one-to-one conferences. Interventions focus on strategy-based instruction in the content areas. In Tier 2, struggling readers receive supplemental small-group instruction from intervention specialists. Tier 3 interventions include individual or small groups of 1:3 or less, and are provided to students who are reading below average levels. In schools with literacy coaches, the coaches spend up to 40% of their time providing Tier 2 and Tier 3 interventions to the most-needy students. Special education teachers provide Tier 4 support in collaboration with Tier 1 classroom intervention to provide a seamless transition for learning disabled students.

The Comprehensive Intervention Model as a Response to Intervention Approach

In this section, we'll examine the Comprehensive Intervention Model as a response to intervention method. A critical element of RTI is that the approach must be research-based; furthermore, the design must be solid enough to ensure integrity and consistency in implementation. Yet, at the same time, the design must be flexible enough to respect the decision-making knowledge of teachers and to accommodate the variability in students' learning. In the CIM, the intervention components have been

Table 1. Two Waves of Literacy Defense: K–3 Represents Intervention Wave 1

Literacy Goal: To increase literacy achievement by the end of third grade and to reduce the number of children identified with learning disabilities within 1.5% or less of the general population.

Therefore, to promote accelerated learning (in contrast to remediation), students receive multiple layers of interventions at the same time. Tier 1 classroom instruction is provided alongside any supplemental intervention. Supplemental interventions are not linear, but rather are based on intensity, expertise, and student needs. Referrals to special education are based on students' responses to intervention in Tiers 1, 2, and 3.

	Tier 1 (classroom intervention beyond core program)	Tier 2 (supplemental group)	Tier 3 (supplemental instruction)	Tier 4 (special education in literacy processes)
Levels of Intensity	Classroom Teacher (differentiated instruction)	Intervention Specialist (small group)	Intervention Specialist (individual or 1:2)	Special Education Teacher (small groups or 1:1)
Layered Configurations	Tier 1 only	Tier 2 plus Tiers 1 & 3 Tier 2 plus Tier 1	Tier 3 plus Tier 1 Tier 3 plus Tiers 1 & 2	Tier 1 plus Tier 4
Kindergarten Interventions	Provides small-group intervention in emergent literacy foundations to students who are lagging behind classmates.	Provides additional layer in small-group intervention in emergent literacy group.		
First-Grade Interventions	Provides small-group intervention in assisted writing, guided reading plus, or writing conferences for students who are lagging behind classmates.	Provides additional layer in small-group intervention in assisted writing, guided reading plus, or writing process.	Provides Reading Recovery for most-neediest students at beginning of school year; second-round students receive small group (Tier 2) prior to Reading Recovery.	For students who received Tiers 1 & 2 in kindergarten and Tiers 1, 2, and 3 in first grade, the classroom teacher might start the referral process for special children who are not responding to interventions.
Second-Grade Interventions	Provides small-group intervention in assisted writing, guided reading plus, writing conference, or comprehension focus groups.	Provides additional layer in small-group intervention in assisted writing, guided reading plus, writing process, or comprehension focus group.	Provides reading and/or writing conferences in 1:1 or 1:2 tailored interventions. Intervention conferences align with classroom instruction.	If student does not respond to Tiers 1, 2, and 3, classroom teacher starts referral process for special education.
Third-Grade Interventions	Provides small-group intervention in assisted writing, guided reading plus, writing conference, or comprehension focus groups.	Provides additional layer in small-group intervention in assisted writing, guided reading plus, writing process, or comprehension focus group.	Provides reading and/or writing conferences in 1:1 or 1:2 tailored interventions.	If student does not respond to Tiers 1, 2, and 3, student is placed in special education.

Literacy Goal: In the first wave of literacy defense, 98–99% of struggling learners who received Tiers 1, 2, and 3 interventions will have achieved literacy proficiency by the end of third grade. This goal recognizes that 1.5% or less of the general population may be diagnosed with a literacy disability. In Tier 4, the special education students will continue to receive Tier 1 classroom instruction to meet their literacy needs, and the classroom teacher and special education teacher will collaborate on a seamless approach across the two contexts. The expectation is the special education group will continue to make good progress with the potential to reach literacy proficiency over time.

As students move into the upper grades, a second wave of intervention is designed to ensure that struggling readers receive Tier 1 classroom support in small-group or individual interventions, plus supplemental support as needed by literacy specialists. Tier 3 intervention is provided to students who are reading at below basic levels. This intervention can be provided by literacy coaches, ELL teachers, and reading specialists.

Dorn, L. (2007). *Layers of literacy defense in a comprehensive intervention model: A response to intervention approach*. Center for Literacy, University of Arkansas at Little Rock, Little Rock, AR.

replicated across multiple sites with consistent results and in collaboration with teachers, who have provided valuable insights on students' learning.

Development and research on the CIM

In 1991, Dorn implemented the small-group model to support Reading Recovery teachers who worked with small groups of struggling readers in kindergarten and first grade. In the pilot year, 15 experienced Reading Recovery teachers were trained in the small-group intervention. This group was actively involved in the development and research on the small-group model, including video analysis of lesson components, record keeping, cluster visits, and data collection. In 1993, Dorn conducted a study that examined the complementary effects

of Reading Recovery and the small-group intervention. The study of 187 first graders produced five positive outcomes:

1. Reading Recovery was the most effective intervention for the most-tangled readers in first grade.
2. Some needy students served in kindergarten groups did not need Reading Recovery in first grade.
3. Some first-grade students benefited from small groups and did not require Reading Recovery.
4. Some Reading Recovery students who received small-group instruction prior to Reading Recovery required fewer lessons in Reading Recovery.
5. Some nondiscontinued Reading Recovery students who received small-group instruction after

Reading Recovery achieved average levels by the end of the year.

These preliminary results suggested that a comprehensive approach to early intervention was an effective design for meeting the needs of diverse learners.

During the next 13 years, additional research to examine and refine the CIM was conducted. In 1994, Dorn replicated the 1993 study with 231 students from nine schools and found similar results. In 1995, the study was published in the *Journal of School Research and Information* and was reprinted in 1996 in *Literacy, Teaching and Learning*, a publication of the Reading Recovery Council of North America. In 2002, Paige compared the achievement data of 117 Reading Recovery and small-group students over 3 consecutive years. Paige concluded that the

Table 2. Two Waves of Literacy Defense: 4–12 Represents Intervention Wave 2

Literacy Goal: To increase literacy achievement for all students with simultaneous interventions that focus on research-based, problem-solving strategies for reading and writing in the content areas.

Therefore, classroom teachers in the content areas acquire knowledge of reading strategies, as well as management techniques for differentiating instruction to meet the needs of struggling readers. In Tier 1 classroom instruction, struggling readers receive small-group and one-to-one conferences within a workshop framework. In Tier 2 interventions, struggling readers receive supplemental instruction provided by literacy specialists, literacy coaches, and ELL teachers. In Tier 3 intervention, students who are reading below the basic level receive personalized instruction during 1:1 or 1:2 tutoring sessions. Special education teachers provide Tier 4 support in collaboration with Tier 1 classroom intervention to ensure a seamless transition for learning disabled students.

Tier 1 (classroom intervention beyond core program)	Tier 2 (supplemental group)	Tier 3 (supplemental instruction)	Tier 4 (special education in literacy processes)
Classroom Teacher (differentiated instruction)	Intervention Specialist (small group)	Intervention Specialist (individual or 1:2)	Special Education Teacher (small groups or 1:1)
Tier 1 only	Tier 2 plus Tier 1	Tier 3 plus Tier 1	Tier 1 plus Tier 4
Provides differentiated instruction in a workshop framework, including whole-group, small-group, and one-to-one conferences. Struggling readers receive classroom intervention in small-group or individual reading/writing conferences.	Provides small-group supplemental intervention for students who are reading below grade level.	Provides most-intensive intervention for students who are reading at below basic level in reading and need highly tailored tutoring in 1:1 or 1:2 conferences.	Provides small-group intervention that aligns with classroom support for students with learning disabilities.

Dorn, L. (2007). *Layers of literacy defense in a comprehensive intervention model: A response to intervention approach*. Center for Literacy, University of Arkansas at Little Rock, Little Rock, AR.

Reading Recovery children scored significantly higher on the Stanford 9 Achievement examination than the students in the small-group intervention. Harrison (2003) studied the complementary effects of the Reading Recovery and small group interventions on 307 first graders. Her study concluded the following:

- Reading Recovery was the most effective intervention for the most-needy readers.
- A small percentage of children who needed protracted periods of intervention (beyond 20 weeks) benefited from small-group instruction and reached average reading levels at the end of the school year.
- For some children, participation in the small group prior to Reading Recovery influenced their length of time in the Reading Recovery program.
- Small-group instruction was most beneficial for children who needed supplemental help of a lesser nature. The average text level gain from fall to year-end for the lowest-achieving children who received small-group instruction was very small, indicating that small-group instruction for the most-tangled children was not enough.
- Children served in small-group instruction remained in the intervention for longer periods than the Reading Recovery children.
- The Reading Recovery and small-group programs are

complementary interventions that recognize the diversity of student needs and enable more struggling readers to achieve proficiency in reading and writing.

In 2005, James replicated the work of Dorn (1994) and Harrison (2003) in a large-scale study of 12,000 first graders across six states. James was interested in a deeper exploration of the complementary effects of the two interventions, specifically, the progress of the students in the small-group intervention who were not making adequate progress. She found that of the 6,421 students originally assigned to small group, 2,423 (or 39.1%) were not making adequate progress at midyear. These small-group students were reassigned to Reading Recovery and their literacy learning was profoundly influenced. Using regression analysis, a comparison was made between the actual year-end results following Reading Recovery and projected results using small group alone. The findings revealed that Reading Recovery was the intervening factor that allowed these students to respond to intervention in an accelerated manner. In support of the CIM, over 70% of the small-group students made adequate progress, while the remaining 30% required Reading Recovery.

In 2005, Rahi examined the impact of Reading Recovery and small-group interventions on the reading acceleration of 631 first graders in the Fort Smith (Arkansas) School District. Rahi concluded that the majority of students served in both interventions made progress. Like James, she examined the progress of the group of students for whom the small-group intervention was inadequate.

Rahi sought to determine if a change would occur in the learning trajectory for this sample after receiving Reading Recovery. Her findings, in support of James (2005), concluded that a statistically significant change occurred in the students' learning trajectory after they completed Reading Recovery. These studies support the importance of the CIM, indicating that small groups, although effective for a large population of struggling learners, are insufficient for the most-tangled readers. Furthermore, the studies documented that 25–30% of students within the lowest band of the low cohort required individual instruction.

In 2007, Platt investigated the influence of layered interventions (simultaneous interventions) on the writing acceleration of Reading Recovery students. Platt's research was in response to the refinements of the CIM, one of which focused on layered interventions in contrast to tiered interventions. Platt was interested in examining whether a layered, push-in writing intervention, along with Reading Recovery, would impact the writing performance of Reading Recovery students during writers' workshop. She compared three groups: Reading Recovery plus push-in writing group; Reading Recovery plus pull-out writing group; and Reading Recovery and no other intervention group. Each group was assessed on standardized end-of-year writing rubrics and teacher surveys. Platt concluded that the highest-achieving students received Reading Recovery and a push-in writing intervention during the writing workshop in the classroom. Additionally, comparable increases in reading occurred for students who received the push-in writing group.

The ability of the CIM to replicate and sustain itself in varied contexts and with diverse populations, without changing the basic design, is essential to the model's success. Toward this goal, all CIM sites are required to conduct annual evaluations that include studies of student achievement over time, including performance of subgroups on district and state assessments. A district evaluation (Zuniga, Thomas, & Weisenberg, 2007) from a California site examined the reading achievement of English language acquisition (ELA) learners who had participated in supportive (comprehensive literacy) classrooms versus a random sample of students from other classrooms. First-grade students who had the benefit of instruction over 2 years in supportive classrooms with supplemental small-group interventions made the largest reading gains within a 1-year time frame. This was related to the daily implementation of research-based instructional practices, including explicit ELA instruction, and small-group intervention. The researchers concluded that the CIM had a significant influence on the reading achievement of ELA students. Similar results were found in Wisconsin (Fralely & Landwehr, 2007; Meyer & Reindl, 2007) and Michigan (Lower, 2007) sites.

These studies, which span a period of 15 years, document the importance of a comprehensive intervention approach. In a 2007 report entitled *Implications for Reading Teachers in Response to Intervention*, the International Reading Association recognized the comprehensive literacy model in the Walled Lake School District in Michigan as an effective RTI approach. In 2007,

Reading Recovery received the highest rating by the U.S. Department of Education's What Works Clearinghouse for positive effects on general reading achievement and alphabets and for potentially positive effects on reading comprehension and fluency. In *Learning Disabilities: A Contemporary Journal*, Dunn (2007) described Reading Recovery as one component of an RTI approach. In *Reading Research Quarterly*, McEneaney, Lose, and Schwartz (2006) stressed that the RTI professional development component should focus on contingent teaching and decision making, as in the Reading Recovery design.

In summary, the CIM acknowledges Reading Recovery as the best intervention for the most-needy first-grade readers, with the small-group interventions reserved for children of lesser need. The success of the CIM is grounded in three critical areas: (a) the specialized knowledge and expertise of reading teachers, (b) the training and ongoing professional development that focus on sensitive observation and flexible decision making, and (c) the collaborative relationship between university trainers and reading teachers in the refinement of the literacy components.

Components of the Comprehensive Intervention Model

The CIM includes individual and small-group interventions that align with the classroom curriculum. Table 3 on the following page presents a grid of all components, including Reading Recovery. In this section, we'll focus on six small-group components of the model, which can be

delivered as either pull-out or push-in interventions with the exception of the writing process group, which is always implemented during writing workshop in the classroom.

Emergent language and literacy groups for children who are in kindergarten or first grade and are at the emergent level of reading and writing. The intervention emphasizes oral language development, phonemic awareness and phonics, and the important concepts about print that are essential to learning to read. The components include shared reading, interactive writing, and opportunities to engage in language experiences around books that have been read aloud. The groups meet for 30 minutes daily.

Guided reading plus groups for children in Grades 1–3 who are reading at the early to transitional levels of reading and writing, but are lagging behind their classmates

The lesson format spans 2 days with 30 minutes of instruction per day. Day 1 includes four components: preplanned word study activity, orientation to the new book, independent reading with teacher observations, and follow-up teaching points, including discussion of the message. On Day 2, the lesson format begins with assessment: The teacher takes a running record on two children while the other students read easy or familiar texts. Then the focus shifts to the writing component, which includes four predictable parts: responding to yesterday's guided reading text, composing individual messages, writing independently, and holding one-to-one writing conferences with the teacher.

Assisted writing groups designed to support first-grade children at the early stage of writing development who are lagging behind their classmates

During interactive writing and, later, writing-aloud, the students learn about the writing process: composing, revising and editing strategies, and the link between reading and writing.

Writing process groups designed for first- to fourth-grade children who are struggling with the writing process in their writing workshop classrooms

The intervention specialist provides tailored instruction that focuses on the writing process, including draft-

ing, revising, crafting, editing, and publishing processes.

Comprehension focus groups for children who are reading at the transitional level and beyond in Grades 2–6, and who are having difficulty comprehending the wide range of text genres as they move up the grades

The interventions are designed to help students develop reading and writing knowledge for three major text types: narrative, informational, and persuasive. The intervention includes two major components:

(a) Students participate in a comprehension focus unit around a specific

text type or genre for a minimum of 3 weeks; and (b) Students participate in the writing process by developing an original piece of writing within the genre of the focus unit. The lessons are 30 minutes daily.

Comprehension focus groups in content area designed for upper-grade readers who are struggling with reading their content texts

The intervention utilizes the same format as the comprehension focus group described above; however, the students use their context textbooks, as well as other informational texts in the content unit of study. The inter-

Table 3. Intervention Components of the Comprehensive Intervention Model

Group	Role of Reading	Role of Writing	Entry and Exit Assessments	Progress Monitoring	Materials
Reading Recovery	Reading strategies, fluency, comprehension	Writing strategies, early composing strategies	Observation Survey, text reading level	Running record, book graph, writing vocabulary chart	Leveled texts, writing journal
Emergent Language and Literacy	Emergent literacy foundations, language development	Knowledge of print, phonemic awareness, language development	Observation Survey, dictated story, record of oral language	Writing sample, observation notes and running record, if applicable	ABC chart, nursery rhymes, writing journal, interactive writing, big books, easy texts
Guided Reading Plus	Reading strategies, fluency, comprehension	Reading and writing links, writing about reading	Text reading, retelling, word test, fluency measure, writing prompt	Text reading, retelling, fluency measure, reading behavior checklist	Leveled texts, writing journals
Writing Process	Increase reading through writing	Composing, revising, editing strategies	Writing prompt	Writing portfolio, writing checklist, writing prompt	Writing portfolios, mentor texts, writing checklists
Comprehension Focus	Comprehension strategies, knowledge of text structures, deeper understanding of content	Reciprocity of reading/writing, writing process, text organization	Text reading (oral and silent), comprehension measure, writing prompt and scoring rubric	Benchmark book in genre/text unit, writing sample in genre/text unit	Collection of books in focus unit, writing portfolios, text maps and writing guides
Comprehension Focus in Content Area	Comprehension strategies, knowledge of text structures, deeper understanding of content	Reciprocity of reading/writing, writing process, text organization	Text reading (oral and silent), comprehension measure, writing prompt and scoring rubric	Unseen text in content area, writing sample in genre/text unit	Content textbooks or informational texts, writing portfolios, text maps and writing guides

Dorn, L., & Soffos, C. (2007). *Comprehensive intervention model (CIM): A response to intervention method*. Center for Literacy, University of Arkansas at Little Rock, Little Rock, AR.

vention occurs during the content workshop in the classroom, or as a pull-out intervention.

Designing a CIM as a System Intervention

A system intervention is a seamless comprehensive approach to student achievement. The CIM provides teachers with a framework for aligning and managing interventions across the school system. The following steps provide an example of how this might work.

1. Establish an intervention team comprised of all intervention specialists and the classroom teacher. Additional team members can include the principal, literacy coach, and Reading Recovery teacher leader. Use the team to make decisions regarding appropriate services for struggling learners and the best designs for meeting student needs.
2. Use only highly trained teachers with teaching credentials for intervention services. Provide additional training for these teachers in intervention assessments and precision teaching.
3. Identify all supplemental intervention specialists according to their expertise (e.g., Reading Recovery, English language learners, special education, intervention specialists).
4. Identify the students within the school who will need intervention services and classify their needs according to intensive and less intensive.
5. Create an intervention schedule for the classroom and identify designated periods where additional classroom interventions will occur.
6. Add supplemental interventions to the classroom schedule. Collaborate on how to layer interventions; for example, if a classroom teacher is able to only provide an additional reading group three times a week, the literacy coach (who also serves as an intervention specialist 30–45 minutes each day) can provide the intervention on alternate days.
7. Collaborate on student progress across all interventions. Design a system for progress monitoring that will allow all intervention teachers to chart student growth over time.

A systemic approach requires teachers to collaborate around common goals and to monitor student progress across programs. Intervention team meetings are an essential part of the RTI process. A team consists of intervention specialists (e.g., Reading Recovery, Title I, special education, ELL), classroom teachers, and other instructional leaders (e.g., principal, teacher leaders, literacy coaches). The team reviews the student data and makes decisions regarding the appropriate interventions. The following questions may provide schools with a framework for selecting the appropriate interventions based on overall student achievement.

1. How many students at each grade level are scoring below proficiency levels on reading and writing measures? If more than 20% in a particular grade are reading at low levels, the classroom program may be inappropriate. In this case, the intervention specialist might choose to work more closely with the classroom teacher during push-in intervention groups.

2. How many kindergartners are scoring at low language levels? If disproportionate numbers are scoring at low levels, the intervention specialist might schedule time for emergent language and literacy groups.
3. How many second graders are reading below proficiency (and how far below)? Did these students receive intervention during the first grade? The intervention specialist might provide these students with a comprehension focus group, a writing process group, or a guided reading plus group.
4. Does the school have a highly mobile subgroup? What supports are in place for transfer students who need interventions in reading? The intervention specialist might include flextime in her schedule, allowing daily time for testing new students, observing in the classroom, and working with transfer students until a more permanent opening occurs.
5. How are third and fourth graders performing on state assessments? In what areas are they scoring below their classmates? The intervention specialist might schedule time to work in the classroom in selected areas, such as comprehension focus groups in the content area.

A CIM uses a problem-solving, data-driven process for increasing literacy achievement across the school. To illustrate, at the beginning of the school year, the intervention specialist might serve kindergarten and first-grade intervention groups; and at midyear, she might shift her services to third- and fourth-grade intervention groups. A typical schedule is

included in Figure 3, indicating that the Reading Recovery teacher/intervention specialist is able to service nearly 40 low-achieving readers across the school day. In a districtwide intervention plan, all teachers are provided with intervention training and professional development for supporting struggling readers. This seamless approach emphasizes a constructivist model whereas teachers build on and extend students' knowledge across programs, grades, and schools.

Closing Thoughts

In this article, we have presented the Comprehensive Intervention Model as a research-based, decision-making design for meeting the needs of diverse learners in a response to intervention approach. The model is a conceptual framework for aligning interventions across classroom and supplemental programs, ensuring consistency for our most fragile learners. The CIM is a system intervention that is based on five core principles:

1. Intervene early.
2. Use a seamless approach.
3. Provide layered interventions.
4. Make ethical and informed decisions.
5. Employ a collaborative, problem-solving method.

The heartbeat of the CIM is the responsive teacher, one who understands change over time in literacy processing and is able to adjust instruction to accommodate student learning.

Figure 3. Typical Schedule for Intervention Specialist Serving Grades 1, 2, and 3

Time	Grade	Intervention	Students
8:00–8:30	1	Reading Recovery	1
8:35–9:05	1	Reading Recovery	1
9:10–9:30	1	Guided Reading Plus Group (pull out)	5
9:35–9:55	1	Guided Reading Plus Group (push in)	5
10:00–10:30	1	Guided Reading Plus Group (pull out)	3
10:35–11:05	1	Reading Recovery	1
11:10–11:30	2	Guided Reading Plus Group (pull out)	5
11:30–12:00		Lunch	
12:00–12:30		Planning Time	
12:30–1:00	1	Writing Process Group (push in)	3
1:05–1:35	2	Writing Process Group (push in)	4
1:40–2:10	1	Reading Recovery	1
2:15–3:00	3	Content Workshop (push in)	5
3:05–3:25	3	Comprehension Focus Group (pull out)	5

References

- Center for Literacy. (2007). *A comprehensive literacy model: A guidebook for small group interventions*. University of Arkansas at Little Rock, Little Rock, AR: Author.
- Clay, M. M. (1998). *From different paths to common outcomes*. York, ME: Stenhouse.
- Clay, M. M. (2005). *Literacy lessons designed for individuals part two: Teaching procedures*. Portsmouth, NH: Heinemann.
- Dorn, L. (1993). *Meeting the needs of struggling readers with Reading Recovery and small group interventions*. Unpublished technical report. University of Arkansas at Little Rock, Little Rock, AR.
- Dorn, L., & Allen, A. (1995, Summer). Helping low-achieving first graders: A program combining Reading Recovery tutoring and small-group instruction. *ERS Spectrum: Journal of School Research and Information*, 13(3), 16–24.
- Dunn, 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.
- Fraleigh, M., & Landwehr, A. (2007). *Program results on the comprehensive literacy model*. Unpublished report. Sullivan Elementary School, Green Bay School District, Wisconsin.
- Fuchs, D., & Fuchs, L. (2006, January, February, March). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41(1), 93–99.
- Gersten, R., & Dimino, J. (2006, January, February, March). RTI (response to intervention): Rethinking special education for students with reading difficulties (yet again). *Reading Research Quarterly*, 41(1), 99–108.
- Gersten, R., Fuch, 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.

Harrison, L. (2003). *A study of the complementary effects of Reading Recovery and small group literacy instruction*. Unpublished educational specialist thesis, University of Arkansas at Little Rock, Little Rock, AR.

International Reading Association. (2007). *Implications for reading teachers in response to intervention*. Retrieved December 10, 2007, from IRA website: http://www.reading.org/downloads/resources/rti0707_implications.pdf

James, K. (2005). *A study of the complementary effects of Reading Recovery and small group instruction on the literacy achievement of struggling first grade readers*. Unpublished educational specialist thesis, University of Arkansas at Little Rock, Little Rock, AR.

Lose, M. (2007). A child's response to intervention requires a responsive teacher of reading. *The Reading Teacher*, 61(3) 276–279.

Lower, C. (2007). *A longitudinal study of the partnerships in comprehensive literacy model on student achievement and teacher change in the Dearborn, Michigan school district*. Unpublished educational specialist thesis, University of Arkansas at Little Rock, Little Rock, AR.

Meyer, K., & Reindl, B. (2007). *Program results on the comprehensive literacy model for school improvement*. Unpublished report, Washington Charter School for Comprehensive Literacy, Sheboygan School District, Wisconsin.

McEneaney, J., Lose, M., & Schwartz, R. (2006, January, February, March). A transactional perspective on reading difficulties and response to intervention. *Reading Research Quarterly*, 117–128.

Paige, G. (2002). *Effects of Reading Recovery and early literacy programs to teach strategies to struggling first grade readers*. Unpublished educational specialist thesis, University of Arkansas at Little Rock, Little Rock, AR.

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Platt, R. (2007). *The effects of layered interventions on the writing acceleration of struggling first grade writers*. Unpublished educational specialist thesis, University of Arkansas at Little Rock, Little Rock, AR.

Rahi, K. (2005). *Research on Reading Recovery and small group interventions*. Unpublished report, Fort Smith School District, Arkansas.

What Works Clearinghouse. (2007, March 19). *Intervention: Reading Recovery*. Retrieved December 10, 2007, from U.S. Department of Education Institute of Education Sciences website: http://ies.ed.gov/ncee/wwc/reports/beginning_reading/reading_recovery/

Zuniga, J., Thomas, C., & Weisenberg, A. (2007). *Program results on the comprehensive language and literacy model*. Unpublished report, Lodi Unified School District, California.