

# A Tiered Service-Delivery Model



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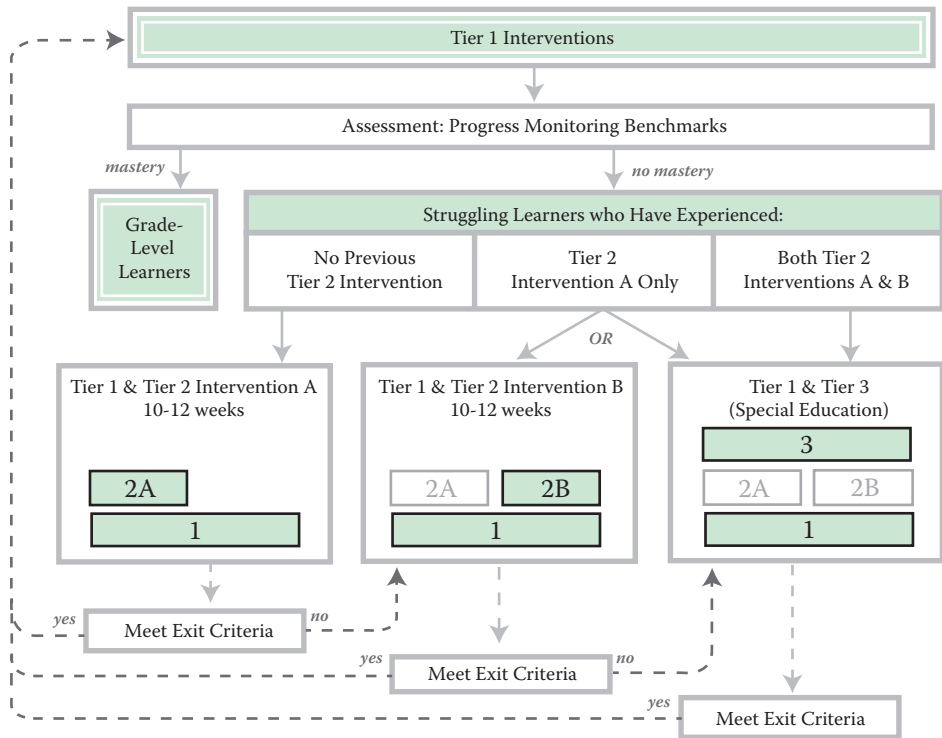
\*Note: Each of the above sections includes background information, descriptive information, activities, and resources. See the first page of each section for a complete listing of that section's content.

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## OVERVIEW

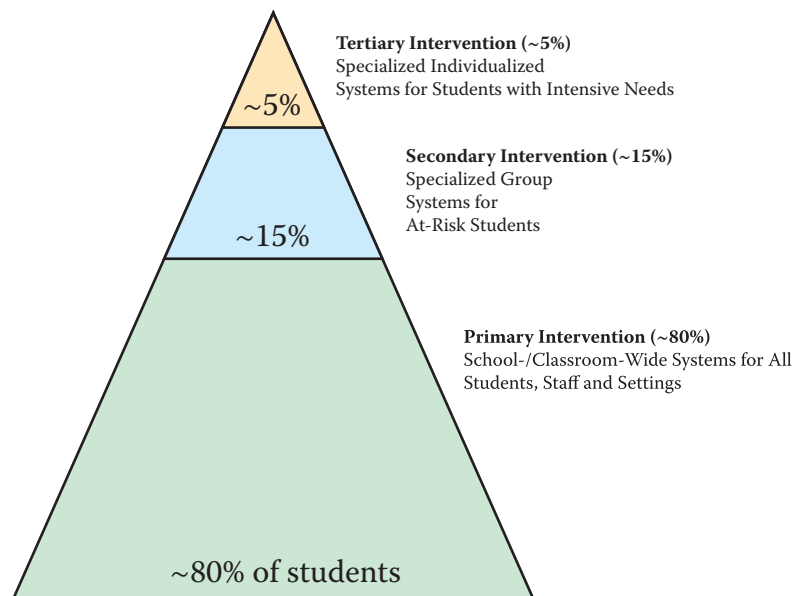
Responsiveness to intervention (RTI) is a multitiered service-delivery model. Although much discussion continues surrounding the issues of how many tiers constitute an adequate intervention (O'Connor, Fulmer, & Harty, 2003; Tilly, 2003; Vaughn, 2003; Marston, 2003), RTI is most frequently viewed as a three-tiered model, similar to those used for service-delivery practices such as positive behavioral support. Figure 3.1 depicts a three-tiered model as conceived in an RTI framework.

Figure 3.1. Responsiveness to Intervention: Tier 1, Tier 2 and Beyond, Special Education



Adapted from Vaughn (2003)

Figure 3.2. Continuum of Intervention Support for At-Risk Students



*Adapted from "What is School-Wide PBS?" OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports.*

In attempting to adequately discuss the multitiered nature of RTI, and knowing that schools may decide to implement more than three tiers of intervention, we will refer to Tier 1 as primary supports for students in the general education classroom. Tier 2 and beyond will refer to secondary-level interventions in specialized groups for at-risk students, that is students who have not been responsive in a Tier 1 intervention or who are predicted to be at risk based on screening results. Our tier labeling allows for districts to organize multiple levels of targeted interventions that are distinct from special education. For example, schools might implement three or more tiers. We will refer to the tertiary level of specialized and individualized interventions for students with intensive disabilities as special education. Figure 3.2 depicts this continuum of school-wide support and indicates the approximate percentage of students whose service delivery will be provided at each level.

Like other models, RTI is meant to be applied on a school-wide basis, in which the majority of students receive generally effective, scientifically based instruction in Tier 1, the general classroom. Within Tier 1 instruction, schools can use special funding allocations attached to early intervening services. Students in Tier 1 who are at risk for reading and

other learning disabilities are identified through school-wide screening for more intense support in Tier 2 and beyond interventions. Students who have been identified as having specific learning disabilities (SLD) are not eligible to receive early intervening services. Students who fail to respond to the interventions provided in Tier 2 and beyond may then be referred for an individualized, comprehensive evaluation and, depending upon the results, be considered for specialized instruction in special education (adapted from Vaughn, 2003).

In multitiered models of service delivery, instruction is differentiated to meet learner needs at various levels. Several specific factors or dimensions help distinguish among interventions at the various tier levels. In general, a higher degree of specificity and intensity is associated with a higher tier of intervention. For exam-

ple, instructional grouping could vary from whole class (Tier 1) to one-on-one (special education). The following features are used throughout this section's description of the instructional strategy, design, and approach in the various tiers:

- Size of instructional group
- Mastery requirements of content
- Frequency of progress monitoring
- Duration of the intervention (weeks)
- Frequency with which the intervention is delivered
- Instructor's skill level
- Focus of the content or skills

In Parts One, Two, and Three of *Section 3: A Tiered Service-Delivery Model*, we elaborate on the features that comprise Tier 1, Tier 2 and beyond, and special education in the context of RTI. You will gain a heightened appreciation for the application of school-wide screening and progress monitoring in the multitiered service-delivery model. The importance of incorporating data-based decision making in service delivery will be addressed as will the benefits of parent involvement.

# Part One

## Tier 1

### (Primary Supports and Interventions)

#### **PART ONE CONTENTS**

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#### **BACKGROUND**

An RTI approach incorporates a multitiered model of educational service delivery in which each tier represents increasingly intense services that are associated with increasing levels of learner needs. The various tier interventions are designed to provide a set of curricular/instructional processes aimed at improving student response to instruction and student outcomes. In this system, primary supports and interventions, commonly known as Tier 1 interventions, represent the *least-intensive* level of service delivery. Tier 1 is designed to serve *all* students in the school with well-supported instructional programs. Tier 1 interventions are intended to be proactive and preventive (National Association of State Directors of Special Education [NASDSE], 2005). This means that the core foundation of curriculum, instruction, and school organization increases the likelihood of improved student achievement and success for all students and may reduce the number of students who are referred for special education services and supports. In this section, we describe the components and processes necessary to provide high-quality Tier 1 instruction. Additionally, we provide activities and tools to guide schools during Tier 1 implementation.

# Features

## Definition and Features

In the RTI framework, Tier 1 occurs in the general education classroom. General educators are expected to assume responsibility for instruction at this level. This tier is considered the high-quality instruction that is the focus of the No Child Left Behind Act of 2001 (P.L. 107-110) (NCLB 2001). The language of the Individuals with Disabilities Education Improvement Act of 2004 (P.L. 108-446) (IDEA 2004) indicates that students must receive appropriate learning experiences before a disability can be considered as a basis for achievement or behavioral difficulties. In Tier 1, general education teachers adopt scientifically-based instructional programs in reading, writing, and math and ensure accurate and consistent instructional delivery through measures of fidelity of implementation. In Tier 1, general educators are expected to participate in regular and rigorous professional development to continuously build their professional competencies. In effect, instruction in Tier 1 is instruction using a standard treatment protocol.

Tier 1 includes the following features:

*Size of instructional group.* Tier 1 instruction is provided to the whole class.

*Mastery requirements of content.* Cut points identified on screening measures and continued growth as demonstrated by routine progress monitoring are indicators of content mastery.

*Frequency and focus of screening.* In general, screening assessments occur at least three times per year, are school wide, use a broad index, and are used to identify students who are at risk and to inform school or class-wide instruction and curriculum decisions.

*Frequency and focus of progress monitoring.* Recommendations on progress monitoring vary. In general, progress monitoring occurs at least once every three weeks, often as frequently as weekly, twice weekly, or even daily. Progress monitoring takes place in all tiers. At-risk students in Tier 1 need to be monitored at a more frequent rate than the three times per year rate provided by screening. Some researchers (Fuchs, 1989) suggest the moni-

toring of student progress at Tier 1 either weekly or twice a week. It is likely that students who receive Tier 2 and beyond or special education interventions will require progress to be monitored at least weekly and often more frequently. Progress monitoring assessments are focused on a class, small group, or individual student and target a specific academic skill. Results of progress monitoring provide data that can be used to make decisions about regrouping students or about continuing, revising, or changing an intervention.

*Duration of the intervention.* Students remain in Tier 1 throughout the school year unless found eligible for special education and specially designed instruction that cannot be provided in the general classroom.

*Frequency with which the intervention is delivered.* Instruction in Tier 1 intervention occurs according to school schedules and curriculum guidelines.

*Instructor qualifications.* Tier 1 instruction is provided by general educators who are “highly qualified” as defined by NCLB 2001 legislation.

Tier 1 intervention is characterized by high-quality, scientifically based instruction that occurs in the general education classroom and is implemented by the general education teacher. The use of scientifically based programs and practices ensures that student difficulties cannot be attributed to inappropriate or ineffective, poor-quality classroom instruction. Moreover, NCLB 2001 mandates the use of “scientifically-validated instruction” among practitioners.

Several resources are available to assist consumers in evaluating whether an educational intervention is supported by scientifically based research. For example, the Coalition for Evidence-Based Policy (2003) advances the following three-step process in its guide, “Identifying and Implementing Educational Practices Supported by Rigorous Evidence: A User Friendly Guide,” to evaluate whether an educational intervention is supported by rigorous evidence:

1. *Is the intervention backed by strong evidence (quality and quantity needed) of effectiveness?*
2. *If this intervention is not backed by “strong” evidence, is it backed by “possible” evidence of effectiveness?*
3. *If the answers to both questions above are “no,” one may conclude that meaningful evidence does not support the intervention.*

#### **TIER 1 WITHIN AN RTI MODEL**

In RTI systems, Tier 1 instruction is the base level of educational service delivery aimed at meeting the needs of most students in the school setting. Accordingly, most students will achieve academic success when provided Tier 1 instruction as described

in this section. Tier 1 reduces the incidence of “instructional casualties” by ensuring that students are provided high-quality instruction and monitoring.

Tier 1 is particularly important as this intervention level represents the first “gate” in a system designed to better accommodate the diverse learning needs of all students. Tier 1 provides the foundation for instruction upon which all supplementary interventions (e.g., Tier 2 and beyond, special education) are formulated in a system of responsiveness to intervention. An important benefit of Tier 1 instruction is that the high-quality instruction and monitoring highlights students who need supplemental support (e.g., small-group or individualized instruction that is more intense or frequent).

## *Changes Changing Structures, Roles, and Responsibilities*

Tier 1 will require significant changes to many staff roles and responsibilities and to school structures.

RTI models are intended to provide needed interventions to students in a timely manner. These models work in the context of general education and as such help ensure that students do make adequate yearly progress toward the state’s learner outcomes. For many schools, this shift differs from special education as the primary service model for students with learning or performance problems. In RTI models, general education staffs have responsibility for examining student progress and achievement through a system designed to support student success and “catch” all students who experience trouble. Such a system requires an integrated approach to service delivery that includes “leadership, collaborative planning, and implementation by professionals *across* the education system” (NASDSE, 2005, p. 3). This approach represents a significant change in typical roles within the school structures. In Tier 1, general educators take a more active role

in the screening, identification, and intervention processes of students judged as at risk (as evidenced by predictive screening measure results) or not meeting adequate progress (as evidenced by progress monitoring measure results). Table 3.1 divides school personnel into three main areas and describes some of the responsibilities that personnel within these areas may be expected to undertake in Tier 1.

In the RTI framework, student progress/achievement is monitored very closely—revealing a subset of students who are at risk for school failure. Some of these at-risk students will require specialized interventions within general education while others may have a disability that will be diagnosed and treated with special education. Regardless, close collaboration between general and special education will promote a more seamless system of service provision that will strengthen both the delivery of high-quality interventions for all students and the integrity of the disability identification process (Learning Disabilities Roundtable, 2002).

Table 3.1. School Personnel and Some of Their Responsibilities

General Education*	Specialist/Support Staff*	Administration*
<p>Provide scientifically based core instructional programs</p> <p>Support implementation of school-wide screening</p> <p>Monitor student progress through curriculum-based measurement (CBM)</p> <p>Use data to inform instructional decision-making; analyze progress monitoring results to determine which students are at risk and require more intense instructional support</p> <p>Participate in regular and rigorous professional development (Fuchs &amp; Fuchs, 2005)</p> <p>Collaborate with designated teams/staff to formulate plans for at-risk students (i.e., students moving into Tier 2 and beyond and students who are referred to special education)</p>	<p>Support implementation of school-wide screening to identify students who may be at risk</p> <p>Collaborate with general education to monitor student progress and assist in analyzing progress monitoring results to determine which students are at risk and require more intense instructional support</p> <p>Participate in regular and rigorous professional development (Fuchs &amp; Fuchs, 2005)</p>	<p>Ensure that scientifically based core instructional programs are provided for the general education teachers</p> <p>Ensure implementation of a school-wide screening program</p> <p>Ensure progress monitoring of students, such as through curriculum-based measurement (CBM)</p> <p>Ensure that measures to monitor fidelity of Tier 1 interventions are in place</p> <p>Oversee analysis of the progress monitoring results to determine which students are at risk and require more intense instructional support</p> <p>Ensure that teachers are provided regular and rigorous professional development (Fuchs &amp; Fuchs, 2005)</p>

\* General Education includes the general education teacher

\* Specialist/Support Staff includes the special education teacher, reading or learning specialists, related services personnel, paraprofessionals

\* Administration includes building principals and assistants as well as curriculum or assessment specialists at building or district levels

# Activities/Tools

## *Methods and Procedures*

The following activities (*Activity 3.1: Essential Task List for Tier 1*, *Activity 3.2: Standards for Judging High-Quality Tier 1 Interventions*, and *Activity 3.3: Internal Resources Needed to Implement Tier 1*) provide ways for your school to think about implementing Tier 1 instruction in a multitiered RTI service-delivery model.

# Activity 3.1

## Essential Task List for Tier 1 Instruction

Directions: In the second column, write the name of the individual or team who will assume responsibility for the task identified in the first column. In the third column, write the deadline for or status of the task. Complete each task identified.

Task	Responsible Individual/Team	Timeline/Status
Identify scientifically based instructional programs in reading, writing, and math		
Select evidence-based curricula/interventions and resources to accompany core instructional programs		
Adopt a system to measure fidelity of implementation		
Select and implement a school-wide academic and behavior screening program		
Identify team and process to manage screening results		
Establish data-collection system and implement systematic monitoring of student progress (such as curriculum-based measurement) to determine both level and growth rate.		
Identify team and process to analyze progress monitoring results.		
Develop decision rules (including cut scores) to determine which students are at risk and require more intense instructional support		
Develop a program of continuous, rigorous professional development experiences related to scientifically based curriculum and teaching practices, progress monitoring, implementing practices with fidelity, and data-based decision-making		
Develop and implement a process for collaborating with the problem-solving team and monitoring student movement between Tier 1 and Tier 2		
Decide when to initiate parent involvement		



# Activity 3.2

## Standards for Judging High-Quality Tier 1 Instruction

Directions: Read each of the standards, which have been identified as mechanisms for judging high-quality Tier 1 instruction. The checklist is formatted so that you can indicate current and planned implementation.

- If the practice has been implemented, indicate that with a checkmark (√).
- If the practice is being developed, rank its priority: 1 = highest priority through 3 = lowest priority.

Keep in mind that NCLB 2001 defines *scientifically based research* as “research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs.” Numerous sources (Coalition for Evidence-Based Policy, 2003; Comprehensive School Reform Program Office, 2002; National Research Council, 2002; NCLB, 2001) agree that scientifically based research’s defining characteristics include “persuasive research that empirically examines important questions using appropriate methods that ensure reproducible and applicable findings” (Beghetto, 2003).

Standard	Status	
	In Place (√)	Priority (1-2-3)
Scientifically based reading instruction and curriculum emphasize the five critical elements of reading (phonemic awareness, phonics, fluency, vocabulary, and comprehension).		
Core reading program occurs for > 90 minutes each day.		
Professional development focuses on improving instruction methods.		

(Mellard & McKnight, 2006; National Research Center on Learning Disabilities [NRCLD], 2005)

# Activity 3.3

## *Internal Resources Needed to Implement Tier 1 Instruction*

Directions: In *Activity 3.2: Standards to Judge High-Quality Tier 1 Instruction*, you identified which Tier 1 intervention standards had been implemented in your organization and which standards still need attention. In the space below, list the resources (material, curriculum, space, equipment, and people) your organization will need to effectively implement the standards.

Material/Curriculum	Space/Equipment	People

# Resources

## Resources for Tier 1

We have compiled a brief (but not exhaustive) list of materials available to help inform educators about evidence-based interventions that may be appropriate for reading instruction at the Tier 1 level. These resources are intended to be a source of information about programs and publications that will help teachers, principals, and district personnel in their choice of materials that can be used by skilled teachers to provide effective instruction and successfully implement an RTI program. Whether or not a program or publication has been listed does not constitute endorsement or lack of endorsement by NRCLD. These resources do not constitute an “approved” or “required” list. Also, many potentially useful programs or publications may not be listed here. We hope that readers will complete careful reviews of available alternatives.

*CORRECTIVE READING (SRA/MCGRAW HILL)*

<http://www.sra4kids.com>

*Corrective Reading* provides intensive intervention in grades 4–12 for students who are reading one or more years below grade level. This program delivers tightly sequenced, carefully planned lessons that give struggling students the structure and practice necessary to become skilled, fluent readers and better learners.

*GUIDED READING (HEINEMANN PRESS)*

<http://books.heinemann.com/search/default.aspx>

Authors Gay Pinnell and Irene Fountas wrote *Guided Reading* for grade K–3 educators and administrators. The book explains how to create a balanced literacy program based on guided reading and supported by read aloud, shared reading, interactive writing, and other approaches.

*HARCOURT READING/LANGUAGE ARTS PROGRAM*

(HARCOURT)

<http://www.harcourtschool.com/index.html>

Harcourt Reading/Language Arts Program is a balanced, comprehensive program that includes oral language, phonological awareness, literature, comprehension, letter-sound knowledge, vocabulary, and writing.

*LITERACY PLACE (SCHOLASTIC)*

<http://teacher.scholastic.com/literacyplace/>

*Literacy Place* is a grades K–6 reading and language arts program offering research-based systematic skills development, great literature, and state-of-the-art technology to make every child a successful reader.

*OPEN COURT (SRA/MCGRAW HILL)*

<http://www.sra4kids.com/>

*Open Court Reading* is a research-based curriculum grounded in systematic, explicit instruction of phonemic awareness, phonics and word knowledge, comprehension skills and strategies, inquiry skills and strategies, and writing and language arts skills and strategies.

*PEER-ASSISTED LEARNING STRATEGIES (PALS) (VANDERBILT KENNEDY CENTER FOR RESEARCH ON HUMAN DEVELOPMENT)*

<http://kc.vanderbilt.edu/pals/>

*PALS Reading* and *PALS Math* enable classroom teachers to accommodate diverse learners and help a large proportion of these students achieve success. *PALS Reading* and *PALS Math* have been approved by the U.S. Department of Education’s Program Effectiveness Panel for inclusion in the National Diffusion Network on effective educational practices.

*PHONICS FOR READING (CURRICULUM ASSOCIATES)*  
<http://www.curriculumassociates.com/products/detail.asp?topic=TOR&sub=TOR5&title=PhonicsReading&Type=SCHE&CustId=734168798103221505223>

*Phonics for Reading* is a research-based program of direct instruction in phonics for grades 1–3. It provides age-neutral content and a format appropriate for remedial students in higher grades as well as word-recognition instruction, story reading, spelling instruction, and independent reading-related activities.

*READ WELL K-1 (SOPRIS WEST)*  
<http://www.readwell.net/overview.asp>

Written by Marilyn Sprick, Lisa Howard, and Ann Fidanque, *Read Well* is a research-based reading program that combines systematic phonics, mastery-based learning, and rich content. *Read Well* is published by Sopris West Educational Services.

*SIGNATURES READING SERIES (HARCOURT)*  
<https://jstore.harcourtschool.com/marketplace/index.html>  
*Signatures* offers collections of grades K–6 books, phonics components, English as a second language/Title I libraries, integrated language arts components, assessment opportunities, and integrated technology designed to promote literacy and a lifelong love of literature.

*SOAR TO SUCCESS (HOUGHTON MIFFLIN)*  
<http://www.schooldirect.com/store/ProductCatalogController?cmd=Browse&subcmd=LoadDetail&level1Code=8&level2Code=P0041&frontOrBack=FE&division=S01&cmain=003399&cfaded=99CCFF>

Grounded in research and classroom tested with powerful results, *Soar to Success* is an intervention program targeted for intermediate (grades 3–8) students who are not reading up to their potentials.

Additionally, several web sites are available to help inform educators about evidence-based interventions.

*CAMPBELL COLLABORATION*  
[www.campbellcollaboration.org](http://www.campbellcollaboration.org)

The *Campbell Collaboration* (C2) is an international non-profit organization helping people make well-informed decisions about the effects of social, behavioral, and educational interventions. C2 prepares, maintains, and disseminates systematic reviews of intervention studies.

*PROMISING PRACTICES NETWORK*  
<http://www.promisingpractices.net/>

The *Promising Practices Network* is dedicated to providing quality evidence-based information about what works to improve the lives of children, youth, and families. This web site features summaries of programs and practices proven to improve outcomes for children. All information on the site has been screened for scientific rigor, relevance, and clarity.

*WHAT WORKS CLEARINGHOUSE*  
<http://www.whatworks.ed.gov/>

The *What Works Clearinghouse* (WWC) collects, screens, and identifies effectiveness studies of educational interventions (programs, products, practices, and policies), by reviewing the studies that have the strongest designs and reporting on the strengths and weaknesses of those studies and providing what the best scientific evidence has to say.

Specific resources exist for evaluating the appropriateness and adequacy of reading programs (e.g., *A Consumer's Guide to Evaluating a Core Reading Program Grades K–3: A Critical Elements Analysis*, Simmons & Kame'enui, 2003).

# Part Two

## Tier 2 and Beyond

### (Secondary Interventions)

#### **PART TWO CONTENTS**

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- *ACTIVITY 3.6: INTERNAL RESOURCES NEEDED TO IMPLEMENT TIER 2 AND BEYOND, PAGE 3.21*
- *RESOURCES FOR TIER 2 AND BEYOND, PAGE 3.22*

#### **BACKGROUND**

RTI is conceptualized as a multitiered service-delivery model similar to a public health or community psychology framework of prevention and intervention. In this conceptualization, Tier 2 and beyond represents a critical juncture in the RTI process. In conjunction with the scientifically based instruction at Tier 1, Tier 2 and beyond forms the school's line of defense for reducing the number of students who are low performing or perhaps later referred for disability determination and special education programs. Providing timely and evidence-based instructional strategies to at-risk students can be the difference between those at-risk students successfully returning to the general education classroom or a referral for special education evaluation (Compton, Fuchs, & Fuchs, 2006). In this section, we review the critical features of Tier 2 and beyond, explain two approaches to implementation, and provide resources and activities for schools to use as a guide for implementation and monitoring.

# Features

## Definition and Features

When a student's school-wide screening or progress monitoring results indicate a deficit in a specific area, an appropriate instructional intervention is implemented and progress within that intervention is monitored. This is Tier 2 and beyond. The Tier 2 and beyond intervention is for those students for whom Tier 1 instruction is insufficient, who are falling behind on benchmark skills, and who require additional instruction to achieve grade-level expectations.

Tier 2 and beyond consists of general education instruction *plus* specialized intervention that has the following features:

*Size of instructional group.* Tier 2 and beyond instruction is provided in small groups (two to four students).

*Mastery requirements of content.* Cut scores identified on screening measures and continued growth as demonstrated by routine progress monitoring are indicators of content mastery.

*Frequency of progress monitoring.* Although recommendations vary, weekly to three times per week monitoring of progress is typical.

*Duration of the intervention.* Tier 2 and beyond interventions last for nine to 12 weeks and can be repeated as needed.

*Frequency with which the intervention is delivered.* Tier 2 and beyond provides for three to four intervention sessions per week, each lasting 30 to 60 minutes.

*Instructor qualifications.* Instruction is conducted by trained and supervised personnel (not the classroom teacher).

Placement in and completion of Tier 2 and beyond interventions can result in one of three possible outcomes (Vaughn, 2003):

1. Successful progress is made in the area of deficit and the student exits Tier 2 and beyond instruction to return to only Tier 1 instruction.
2. Although progress is being made, the student has not progressed enough to warrant leaving and thus remains in Tier 2 and beyond for continuation of the intervention.

3. The rate and amount of progress or the level of support required for the student warrants referral for special education eligibility determination.

### **TIER 2 AND BEYOND WITHIN AN RTI MODEL**

We distinguish between Tier 2 and beyond interventions that might be part of an SLD determination process and a Tier 2 and beyond model used in providing early intervention for students who are at risk for failure.

In the former case, the Tier 2 and beyond interventions have an assessment role and address the assessment question of how well a student responds to a specific research-based intervention. In this role, if a student is performing at a lower level of achievement or is learning at a significantly slower rate than his or her peer group, RTI is used to determine whether inadequate instruction would account for this discrepancy.

In the latter case, Tier 2 and beyond is considered to be an intervention intended to remediate the student's deficits and promote participation in Tier 1 with general education students. Other researchers have offered a similar view of this latter purpose. Many people think of Tier 2 and beyond interventions as prereferral interventions, or "prereferral writ large" (Kavale, Holdnack, Mostert, & Schmied, 2003), that provide support to struggling students and prevent referral to special education.

Two approaches to structuring Tier 2 and beyond interventions have been described in the research literature: (1) problem-solving and (2) standard treatment or intervention protocol (Fuchs, Mock, Morgan, & Young, 2003). Although the two vary in their focus and implementation, the goal of each is to provide supplemental instruction to students for whom Tier 1 instruction is insufficient. Some schools may incorporate a combination of these two approaches. In some implementations, the two approaches occur sequentially with the standard intervention protocol occurring first.

**PROBLEM-SOLVING APPROACH (INDIVIDUALLY DESIGNED INSTRUCTIONAL PACKAGE)**

Most schools currently have an existing form of a problem-solving team, such as a student instructional team (SIT), student study teams (SST), or building assistance team (BAT). The purpose of these teams is to develop an accommodation or modification plan for the instructional program in the general education classroom to support the targeted student, while simultaneously providing a positive effect on the instructional program for all students. Under an RTI service-delivery system, these teams would adopt a problem-solving approach that is based on data and a continuing system of evaluation. Problems need to be objectively defined, observed, and measured directly in the general education classroom. The data collected are then analyzed, using information to develop hypotheses about the cause of the problem and the appropriate selection of evidence-based strategies to remedy them. As the interventions are implemented, the student's progress is monitored at regular points in time. The team continues to meet to discuss the outcome data and determine whether the intervention is having its desired effect, whether the specific intervention needs to be revised, or whether the student should be considered for further evaluation.

Some researchers say that the research on the problem-solving approach suggests it will be used most effectively when developed and implemented according to following attributes:

- A scientific approach to problem solving
- Interventions designed for an individual student
- A system for continual monitoring/evaluation of intervention
- Collaborative relationships with general education and special education to develop, implement, and monitor the intervention
- Collection of information from a variety of sources, including teachers, parents, and others who best know the child
- Use of curriculum-based measurement (CBM) to assist in problem identification and for continuing progress monitoring and evaluation of the effectiveness of the intervention
- Interventions embedded in the daily classroom routine so the classroom teacher takes responsibility for implementation

(adapted from Kovalski, 2003)

At this point, the evidence supporting these attributes is insufficient. Whereas problem solving has been shown to be a scientifically validated approach to help children with behavioral problems, the evidence is insufficient to show effectiveness for children with severe reading and math problems.

**STANDARD-PROTOCOL APPROACH**

Standardized protocols are interventions that researchers have validated as effective, meaning that the experimental applications were completed with the proper experimental and control groups to demonstrate that the interventions work. School staff are expected to implement specific research-based interventions to address the student's difficulties. These interventions are not accommodations to existing curriculum; rather, they are instructional programs targeted to remediate a specific skill. Research for standard protocol interventions should specify the conditions under which the intervention has proven successful, including the number of minutes per day, the number of days per week, and the number of weeks (typically eight to 12) required for instruction with the intervention. Information about each research-based intervention also should describe the specific skills addressed, where the instruction should be provided, who should provide the instruction, and the materials used for instruction and assessing progress (adapted from Fuchs et al., 2003).

Many standardized protocols for reading have been developed. Some are listed in the resources section at the end of this chapter. Some of the key characteristics in a program of Tier 2 and beyond intervention include the following:

- *Focus.* The focus is on students identified with marked reading difficulties and whose response to Tier 1 efforts places them at risk for reading problems. Instruction involves specialized, scientifically based reading programs that emphasize the critical elements of beginning reading.
- *Grouping.* Instruction is provided in homogeneous small groups (teacher-to-student ratios of one-to-three, one-to-four, or one-to-five).
- *Time.* A recommended minimum of 30 minutes of instruction per day in a small group in addition to core reading instruction, generally provided over a period of eight to 12 weeks after which a determination is made about whether the student needs to continue in the program,

- move to more intense levels of intervention, or leave the program to receive Tier 1 instruction only.
  - *Assessment.* Students in Tier 2 and beyond should have their progress monitored on a weekly basis on the targeted skill to ensure adequate progress and learning. Progress monitoring on Tier 1 skills should continue to be monitored to determine whether the intervention is resulting in improvements in reading.
  - *Interventionist.* Personnel are determined by the school, but possible options are the classroom teacher, a specialized reading teacher, or an external interventionist, such as a tutor.
  - *Setting.* Instruction is provided in an appropriate setting—either within or outside of the classroom—designated by the school.
- (Vaughn, 2003)

## *Changes Changing Structures, Roles, and Responsibilities*

Tier 2 and beyond interventions will require significant changes to many staff roles and responsibilities and to school structures. Specifically, schools will need to do the following:

- Develop or adopt an aligned system of progress monitoring and screening measures to identify the population of students as at risk or not making adequate progress in the general education curriculum and therefore eligible for Tier 2 and beyond interventions.
  - Identify scientifically based interventions across the academic domains that can be implemented as intended.
  - Adopt a standardized protocol (i.e., reading intervention curriculum) that is scientifically based.
  - Adopt detailed procedures for consistent implementation of a standard treatment protocol or problem-solving framework for tiered intervention (Fuchs et al., 2003).
  - Provide teacher and staff development to ensure sufficient staff to provide small-group instruction.
  - Adopt a system for continued progress monitoring and review of results along with set criteria for exit, continuation in Tier 2 and beyond, or consideration for movement to special education levels.
- The roles and responsibilities of various staff members will depend on the methods adopted by a school or district and the available staff. Table 3.2 provides a list of roles and responsibilities in a Tier 2 and beyond intervention model.



Table 3.2. Roles and Responsibilities in a Tier 2 and Beyond Intervention Model

General Education*	Specialist/Support Staff*	Administration*
<p>Implement Tier 1 level instruction with fidelity</p> <p>Conduct progress monitoring of all students</p> <p>Evaluate and identify students as at risk and eligible for Tier 2 and beyond</p> <p>Depending on protocol adopted by school, provide Tier 2 and beyond interventions</p> <p>Continue progress monitoring within Tier 1 of students in Tier 2 and beyond for comparison of growth with supplementary instruction and when supplementary instruction is discontinued</p> <p>If other interventionist provides Tier 2 and beyond instruction, collaborate with that staff member on instructional methods used in Tier 1, monitoring progress and incorporating some of the intervention in the classroom to provide continued support for targeted students</p>	<p>Provide Tier 2 and beyond instruction to small groups</p> <p>Monitor progress of students within Tier 2 and beyond and analyze results for consideration of continuation of intervention, exit, or movement to increasingly intense levels of instruction</p> <p>Collaborate with general education teacher to understand the Tier 1 instructional program and provide instructional/supplemental activities that can be embedded within Tier 1 to provide additional support to targeted students</p> <p>Promote either a standard treatment protocol or problem-solving model consistently</p>	<p>Provide resources for Tier 2 and beyond, including appropriate reading intervention program, trained staff, system for progress monitoring in both Tier 1 and Tier 2 and beyond, and time for staff collaboration to make decisions about movement of students within the tiers</p> <p>Lead the problem-solving model approach</p>

\*General Education includes the general education teacher.

\*Specialist/Support Staff includes the special education teacher, reading or learning specialists, related services personnel, paraprofessionals.

\*Administration includes building principals and assistants as well as curriculum or assessment specialists at building or district levels.

# *Activities/Tools*

## *Methods and Procedures*

The following activities (*Activity 3.4: Essential Task List for Tier 2 and Beyond*, *Activity 3.5: Standards for Judging High-Quality Tier 2 and Beyond Interventions*, and *Activity 3.6: Internal Resources Needed to Implement Tier 2 and Beyond*) provide ways for your organization to think about implementing Tier 2 and beyond in a multitiered RTI service-delivery model.

# Activity 3.4

## Essential Task List for Tier 2 and Beyond

Directions: In the second column, write the name of the individual or team who will assume responsibility for the task identified in the first column. In the third column, write the deadline for or status of the task. Complete each task identified.

Task	Responsible Individual/Team	Timeline/Status
Identify structure or make-up of problem-solving team.		
Select resources, curricula, and interventions for use with standard protocol approach in reading (decoding and comprehension), math, and writing.		
Create and continue the development of resources on evidence-based instructional strategies to support identified students.		
Schedule time for general and special education teachers to collaborate, observe, implement, and evaluate strategies.		
Develop decision rules (cut scores, exit criteria) for remaining in or moving out of Tier 2 and beyond (responsiveness vs. unresponsiveness).		
Implement a system of data collection and progress monitoring for Tier 2 and beyond (see Section 2: Progress Monitoring for more information) to determine level and growth rate.		
Provide professional development opportunities for problem solving and protocol approaches.		
Ensure time is scheduled and process is established for teams to meet and review student needs.		
Determine level of intensity of instruction for Tier 2 and beyond (how often, how long, size of instructional group).		
Identify measures and procedures to document fidelity of implementation of interventions.		

# Activity 3.5

## *Standards for Judging High-Quality Tier 2 and Beyond Interventions*

Directions: Read each of the standards, which have been identified as mechanisms for judging high-quality Tier 2 and beyond interventions. The checklist is formatted so that you can indicate current and planned implementation.

- If the practice has been implemented, indicate that with a checkmark (√).
- If the practice is being developed, rank its priority: 1 = highest priority through 3 = lowest priority.

Standard	Status	
	In Place (√)	Priority (1-2-3)
Tier 2 and beyond interventions are research-based.		
Tier 2 and beyond interventions differ from the curricular materials used in Tier 1 instruction.		
Tier 2 and beyond interventions begin as soon as possible after identification or selection of those not responding adequately to Tier 1.		
In addition to Tier 1 instruction, students receiving Tier 2 and beyond interventions do so for at least 30 minutes each day for nine to 12 weeks.		
Size of instructional group is no more than a one-to-five teacher-to-student ratio.		
Decisions about students repeating or continuing the Tier 2 and beyond intervention cycle are based on progress-monitoring data.		
Appropriate instructional settings are designated by the school and include areas within the regular classroom, pod areas, separate classrooms, etc.		
Students may have more than one Tier 2 and beyond intervention cycle.		

(Mellard & McKnight, 2006; NRCLD, 2005)

# Activity 3.6

## *Internal Resources Needed to Implement Tier 2 and Beyond*

Directions: In *Activity 3.5: Standards to Judge High-Quality Tier 2 and Beyond Interventions*, you identified which Tier 2 and beyond intervention standards had been implemented in your organization and which standards still need attention. In the space below, list the resources (material, curriculum, space, equipment, and people) your organization will need to effectively implement the standards.

Material/Curriculum	Space/Equipment	People

# Resources

## Resources for Tier 2 and Beyond

We have compiled a brief (but not exhaustive) list of materials available to help inform educators about reading, mathematics, and writing resources that may be appropriate for instruction at the Tier 2 and beyond level. NRCLD does not endorse these products. These resources are intended to be a source of information about programs and publications that will help teachers, principals, and district personnel in their choice of materials that can be used by skilled teachers to provide effective instruction and successfully implement an RTI program. Whether or not a program or publication has been listed does not constitute endorsement or lack of endorsement by NRCLD. These resources do not constitute an “approved” or “required” list. Also, many potentially useful programs or publications may not be listed here. We hope that readers will complete careful reviews of available alternatives.

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### READING

#### *ACCELERATED READER (AR)*

<http://www.readingonline.org/critical/topping/rolarD.html>

Accelerated Reader, developed by Advantage Learning Systems as a computer software program, is a learning information system that enables free-standing computer-assisted assessment of student comprehension of “real” books. The materials are available from various vendors.

#### *BENCHMARK WORD DETECTIVES PROGRAM*

[http://www.benchmarkschool.org/b\\_available\\_programs.htm](http://www.benchmarkschool.org/b_available_programs.htm)

This program provides students who are bright, struggling readers and writers the tools and strategies they need to become lifelong learners, thinkers, and problem solvers.

#### *CENTER FOR ACADEMIC AND READING SKILLS: EFFECTIVE EARLY READING INTERVENTION (EERI)*

<http://cars.uth.tmc.edu/projects/att/>

The goal of this project at the University of Texas-Houston Health Science Center, in collaboration with Region XIII Education Service Center, is to recognize schools that have effective second-grade early reading intervention programs.

#### *CENTER FOR ACADEMIC AND READING SKILLS*

[http://cars.uth.tmc.edu/projects/tpri/tpri\\_presentation\\_1.shtml](http://cars.uth.tmc.edu/projects/tpri/tpri_presentation_1.shtml)

This site provides a copy of a PowerPoint presentation by Marguerite Held, “After the assessment: Now what?”

#### *MULTICULTURAL READING AND THINKING (MCRAT)*

<http://www.ed.gov/pubs/EPTW/ptw10/ptw10k.html>

MCRAT is a development process designed to help teachers infuse higher-order thinking skills and multicultural concepts into existing curriculum for all students and to measure progress through students’ writing.

#### *PEARSON/SCOTT FORESMAN EARLY READING INTERVENTION*

[http://www.scottforesmancatalog.com/program\\_listing.cfm?site\\_id=741&discipline\\_id=819](http://www.scottforesmancatalog.com/program_listing.cfm?site_id=741&discipline_id=819)

Based on Project OPTIMIZE, this program was designed for at-risk students in kindergarten and first grade who need intensive intervention in phonological awareness, letter names, letter sounds, word reading, spelling, and simple-sentence reading.

*PEER-ASSISTED LEARNING STRATEGIES (PALS) (VANDERBILT KENNEDY CENTER FOR RESEARCH ON HUMAN DEVELOPMENT)*

<http://kc.vanderbilt.edu/pals/>

*PALS Reading* and *PALS Math* enable classroom teachers to accommodate diverse learners and help a large proportion of these students achieve success. *PALS Reading* and *PALS Math* have been approved by the U.S. Department of Education's Program Effectiveness Panel for inclusion in the National Diffusion Network on effective educational practices.

*PHONOLOGICAL AWARENESS AND LITERACY SCREENING (PALS)*

<http://pals.virginia.edu/>

*PALS* assesses young children's knowledge of several important literacy fundamentals that are predictive of future reading success.

*READING PARTNERS GROUP AT WASHINGTON RESEARCH INSTITUTE (WIR)*

<http://www.wri-edu.org/partners>

The *Reading Partners Group* is a research team dedicated to the development and dissemination of evidence-based reading instruction.

*READING RECOVERY® COUNCIL OF NORTH AMERICA*

<http://www.readingrecovery.org/sections/reading/index.asp>

*Reading Recovery* provides a wide variety of programs and services, including publications, annual conferences, advocacy, technical assistance, and special institutes, which strengthen the implementation of *Reading Recovery* and provide opportunities for *Reading Recovery* professionals to collaborate with early literacy advocates and other education professionals.

*READING ROCKETS® LAUNCHING YOUNG READERS.*

<http://www.readingrockets.org>

*Reading Rockets* is a national multimedia project offering information and resources about how young children learn to read, why so many struggle, and how caring adults can help.

*SCHOLASTIC/READ 180*

<http://teacher.scholastic.com/products/read180/>

This is an intensive reading intervention program that helps educators confront the problem of adolescent illiteracy on multiple fronts, using technology, print, and professional development.

*SPELL READ PHONOLOGICAL AUDITORY TRAINING (P.A.T.®)*

[http://www.spellread.com/a/uploads/spellread\\_pat\\_overview.pdf](http://www.spellread.com/a/uploads/spellread_pat_overview.pdf)

This is a research-based, student-centered, results-driven reading and spelling skill development program.

*STRATEGIC INSTRUCTION MODEL (SIM)*

<http://www.kucl.org/sim/index.html>

*SIM*, developed at the University of Kansas Center for Research on Learning, is an integrated model to address many of the needs of diverse learners, while helping teachers make decisions about what is of greatest importance, what can help students learn, and how to teach them well.

*TEXAS PRIMARY READING INVENTORY*

[http://www.tpri.org/Teacher%5FInformation/how\\_to\\_use\\_results.asp](http://www.tpri.org/Teacher%5FInformation/how_to_use_results.asp)

*TPRI* is a valid and reliable assessment tool that provides a comprehensive picture of a student's reading and language arts development. This site offers a slide presentation, "The Differentiated Instruction Difference," about how to use results as resources to plan interventions.

## MATHEMATICS

BELL, N., & TULEY, K. (2003). *IMAGERY: THE SENSORY-COGNITIVE CONNECTION FOR MATH*

The article is reprinted with permission from Lindamood-Bell Learning Processes® on LDOnline at <http://www.ldonline.org/article.php?max=20&id=413&loc=70>

This article deals with mathematics as cognitive process-thinking that requires the dual coding of imagery and language, with imaging as the basis for thinking with numbers and conceptualizing their functions and logic.

FUCHS, L.S., COMPTON, D.L., FUCHS, D., PAULSEN, K., BRYANT, J.D., & HAMLETT, C.L. (2005). *THE PREVENTION, IDENTIFICATION, AND COGNITIVE DETERMINANTS OF MATH DIFFICULTY*.

*Journal of Educational Psychology*, 97, 493-513

In this randomized, controlled field trial, the authors tested the efficacy of a 20-week, small-group preventive tutoring protocol at first grade for use in secondary prevention and documented reliable and important effects on computation, concepts/applications, and story problems. To obtain a manual, with tutor scripts and materials, contact [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu).

FUCHS, L.S., & FUCHS, D. (IN PRESS). *PROGRESS MONITORING WITHIN A MULTI-TIERED PREVENTION SYSTEM: BEST PRACTICES*.

In Grimes, J., & Thomas, A. (Eds.), *Best practices in School Psychology* (Vol. 5). Bethesda, MD: National Association of School Psychologists

This chapter summarizes research on curriculum-based measurement (CBM) in reading and math. As a validated progress-monitoring tool, CBM is an essential tool for screening, designing programs, and indexing student response within an RTI approach to SLD prevention and identification. For additional information, contact [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu).

FUCHS, L.S., FUCHS, D., & COUREY, S.J. (2005). *CURRICULUM-BASED MEASUREMENT OF MATHEMATICS COMPETENCE: FROM COMPUTATION TO CONCEPTS AND APPLICATIONS TO REAL-LIFE PROBLEM SOLVING*.

*Assessment for Effective Instruction*, 30(2), 33-46

This paper summarizes research on curriculum-based measurement (CBM) in math. As a validated progress-monitoring tool, CBM is an essential tool for screening, designing programs,

and indexing student response within an RTI approach to SLD prevention and identification. For additional information, contact [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu).

FUCHS, L.S., FUCHS, D., FINELLI, R., COUREY, S.J., & HAMLETT, C.L. (2004). *EXPANDING SCHEMA-BASED TRANSFER INSTRUCTION TO HELP THIRD GRADERS SOLVE REAL-LIFE MATHEMATICAL PROBLEMS*

*American Educational Research Journal*, 41, 419-445

This study is one in a series of randomized, controlled field trials documenting the strong, positive effects of a third-grade instructional program designed to enhance mathematical problem solving. The program, called "Hot Math," has two components: one to supplement the core mathematics program at the primary prevention level, and the other for use as a secondary prevention small-group tutoring program. For information about how to obtain scripted manuals and materials (one set of manuals and materials for primary prevention; another for secondary prevention), contact [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu).

FUCHS, L.S., FUCHS, D., HAMLETT, C.L., PHILLIPS, N.B., KARNS, K., & DUTKA, S. (1997). *ENHANCING STUDENTS' HELPING BEHAVIOR DURING PEER-MEDIATED INSTRUCTION WITH CONCEPTUAL MATHEMATICAL EXPLANATIONS*

*Elementary School Journal*, 97, 223-250

This study is one in a series of randomized, controlled field trials documenting the strong, positive effects of Peer-Assisted Learning Strategies (PALS) in second through sixth grades, designed to enhance mathematical outcomes. PALS is designed to supplement the core mathematics program at the primary prevention level. With PALS, all students in a class are paired and taught how to work productively about highly structured activities. For information on how to obtain a scripted manual and materials, contact [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu).



FUCHS, L.S., FUCHS, D., & KARNS, K. (2001). *ENHANCING KINDERGARTEN CHILDREN'S MATHEMATICAL DEVELOPMENT: EFFECTS OF PEER-ASSISTED LEARNING STRATEGIES*

*Elementary School Journal*, 101, 495-510

This randomized, controlled field trial documents strong, positive effects for Peer-Assisted Learning Strategies (PALS) in kindergarten for enhancing mathematical outcomes. PALS is designed to supplement the core mathematics program at the primary prevention level. With PALS, all students in a class are paired and taught how to work productively on highly structured activities. For information about how to obtain a scripted manual and materials, contact [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu).

FUCHS, L.S., FUCHS, D., YAZDIAN, L., & POWELL, S.R. (2002). *ENHANCING FIRST-GRADE CHILDREN'S MATHEMATICAL DEVELOPMENT WITH PEER-ASSISTED LEARNING STRATEGIES*

*School Psychology Review*, 31, 569-584

This randomized, controlled field trial documents strong, positive effects for Peer-Assisted Learning Strategies (PALS) in first grade for enhancing mathematical outcomes. PALS is designed to supplement the core mathematics program at the primary prevention level. With PALS, all students in a class are paired and taught how to work productively on highly structured activities. For information about how to obtain a scripted manual and materials, contact [flora.murray@vanderbilt.edu](mailto:flora.murray@vanderbilt.edu).

GARNETT, K. (1998). *MATH LEARNING DISABILITIES*. Division for Learning Disabilities Journal of CEC, November 1998. The article is reprinted with permission on LDOnline at [http://www.ldonline.org/ld\\_indepth/math\\_skills/garnett.html](http://www.ldonline.org/ld_indepth/math_skills/garnett.html)

This article breaks math difficulties down into different types, explains why common teaching practices can perpetuate or exacerbate these problems, and provides ways to structure learning experiences to overcome difficulties in math.

GEARY, D.C. (1999). *MATHEMATICAL DISABILITIES: WHAT WE KNOW AND DON'T KNOW*.

The article is available on LDOnline at <http://www.ldonline.org/article.php?max=20&id=538&loc=70>

This article discusses some of the basic area deficits that contribute to learning disabilities in mathematics (MD) and how many children have MD.

GERSTEN, R., & CHARD, D. (1999). *NUMBER SENSE: RE-THINKING ARITHMETIC INSTRUCTION FOR STUDENTS WITH MATHEMATICAL DISABILITIES*.

*The Journal of Special Education*, 44, 18-28. Reprinted with permission from PRO-ED, Inc. on LDOnline at <http://www.ldonline.org/article.php?max=20&id=537&loc=70>

This article discusses the concept of number sense, an analog as important to mathematics learning as phonemic awareness has been to the reading research field.

HASSELBRING, T.S., LOTT, A.C., & ZYDNEY, J.M. (2006). *TECHNOLOGY-SUPPORTED MATH INSTRUCTION FOR STUDENTS WITH DISABILITIES: TWO DECADES OF RESEARCH AND DEVELOPMENT*

The article is available on LDOnline at <http://www.ldonline.org/article.php?max=20&id=1981&loc=70>

The article provides a brief overview of the three basic types of mathematical knowledge required for the development of mathematical literacy and competence: declarative, procedural, and conceptual knowledge.

JONES, E.D., WILSON, R., & BHOJWANI, S. (1997). *MATHEMATICS INSTRUCTION FOR SECONDARY STUDENTS WITH LEARNING DISABILITIES*

*Journal of Learning Disabilities*, 30(2), 151-163. The article is reprinted with permission on LDOnline at [http://www.ldonline.org/ld\\_indepth/math\\_skills/math\\_jld.html](http://www.ldonline.org/ld_indepth/math_skills/math_jld.html)

This article discusses techniques demonstrated to help with secondary students who have learning disabilities in mathematics.

*LOCK, R.H. (1996). ADAPTING MATHEMATICS INSTRUCTION IN THE GENERAL EDUCATION CLASSROOM FOR STUDENTS WITH LEARNING DISABILITIES*

*LD Forum: Council for Learning Disabilities, Winter 1996. The article is reprinted with permission on LDOonline at [http://www.ldonline.org/ld\\_indepth/math\\_skills/adapt\\_cld.html](http://www.ldonline.org/ld_indepth/math_skills/adapt_cld.html)*

This article provides information about how to adapt and modify mathematics instruction to promote success and understanding in the areas of mathematical readiness, computation, and problem-solving for students with math disabilities.

*REED, M.K. (1995). MAKING MATHEMATICAL CONNECTIONS IN THE EARLY GRADES*

*Posted by ERIC Clearinghouse for Science Mathematics and Environmental Education. The article is reprinted with permission on LDOonline at <http://www.ldonline.org/article.php?max=20&id=736&loc=70>*

The article provides samples of activities for use in the early grades to connect mathematics to other subjects.

*RESEARCH CONNECTIONS (2002, FALL). STRENGTHENING THE THIRD "R": HELPING STUDENTS WITH DISABILITIES ACHIEVE IN MATHEMATICS*

*Posted by ERIC Clearing House on Disabilities and Gifted Education. The article is reprinted with permission on LDOonline at <http://www.ldonline.org/article.php?max=20&id=685&loc=70>*

This article addresses recognition of the need for math knowledge—the 1997 Amendments to the Individuals with Disabilities Education Act raised the bar on what students with disabilities are expected to learn.

*RIVERA, D.P. (1996). USING COOPERATIVE LEARNING TO TEACH MATHEMATICS TO STUDENTS WITH LEARNING DISABILITIES.*

*LD Forum: Council for Learning Disabilities, Spring 1996. The article is reprinted with permission on LDOonline at [http://www.ldonline.org/ld\\_indepth/math\\_skills/coop-math.html](http://www.ldonline.org/ld_indepth/math_skills/coop-math.html)*

This article discusses the components of cooperative learning and presents an example of how cooperative learning can be used to teach mathematics skills.

*STEIN, M., SILBERT, J., & CARNINE, D. (1997). DESIGNING EFFECTIVE MATHEMATICS INSTRUCTION: A DIRECT INSTRUCTION APPROACH*

*Upper Saddle River, NJ: Merrill.*

This math methods book provides practical procedures for increasing student success in math by emphasizing specific, proven techniques for teaching major math and needed prerequisite skills, as well as diagnosing and correcting error patterns.

*WRIGHT, C.C. (1996). LEARNING DISABILITIES IN MATHEMATICS*

*Reprinted with permission from the National Center for Learning Disabilities Inc. on LDOonline at <http://www.ldonline.org/article.php?max=20&id=66&loc=70>*

This article addresses the combination of difficulties associated with learning disabilities in math, which may include language processing problems, visual spatial confusion, memory and sequence difficulties, or unusually high anxiety.

## WRITING

ACCESS CENTER (2006)

<http://www.k8accesscenter.org/>

The Access Center is a national technical assistance center funded by the U.S. Department of Education's Office of Special Education Programs with a mission to improve educational outcomes for elementary and middle school students with disabilities.

ACCESS TO GENERAL CURRICULUM AND UNIVERSAL DESIGN FOR LEARNING: PROBLEM SOLVING APPROACH—CAST TEACHING EVERY STUDENT (2006)

<http://www.cast.org/teachingeverystudent/tools/>

CAST is a nonprofit organization that works to expand learning opportunities for all individuals, especially those with disabilities, through the research and development of innovative, technology-based educational resources and strategies.

BERNINGER, V., ABBOTT, R., WHITAKER, D., SYLVESTER, L., & NOLEN, S. (1995). *INTEGRATING LOW-LEVEL SKILLS AND HIGH-LEVEL SKILLS IN TREATMENT PROTOCOLS FOR WRITING DISABILITIES*

*Learning Disability Quarterly*, 18, 293-309.

This article presents research from tutorial instruction in handwriting automaticity, spelling strategies, and the composing process (plan, write, review, revise) for 24 students who had just completed third grade. Students who received extra practice in composing, as well as orthographic and phonological coding, improved at a faster rate (verbal IQ did not predict rate of improvement).

CASL PAPER

<http://kc.vanderbilt.edu/casl/srsd.html>

Harris, K., Graham, S., & Mason, L. (2006). Self-regulated strategy development in writing: Story and opinion essay writing for students with disabilities or severe difficulties in the early elementary grades. [CASL Paper]. Center for Accelerating Student Learning (CASL) is designed to accelerate learning for students with disabilities or severe difficulties in reading, writing, or math in the early grades and thereby provide a solid foundation for strong achievement in the intermediate grades and beyond.

GRAHAM, S., & HARRIS, K. (2005). *WRITING BETTER: EFFECTIVE STRATEGIES FOR TEACHING STUDENTS WITH LEARNING DIFFICULTIES*

Baltimore, MD: Brookes

This book presents research-validated planning, revising, editing, and self-regulation strategies for improving the writing of elementary-grade students who struggle with writing. Writing strategies cover a broad range of genres, including stories, personal narrative, explanation, cause/effect, persuasive, and informative writing.

GRAHAM, S., & PERRIN, D. (2006). *WRITING NEXT: EFFECTIVE STRATEGIES TO IMPROVE WRITING OF ADOLESCENTS IN MIDDLE AND HIGH SCHOOL*

Washington D.C.: Alliance for Excellence in Education

This companion report to Reading Next identifies instructional procedures that are effective for teaching writing to adolescents in fourth through 12th grades. Special attention is directed to identifying which instructional strategies improve the overall quality of struggling students' writing.

MACARTHUR, C.A. (2006). *THE EFFECTS OF NEW TECHNOLOGIES ON WRITING AND WRITING PROCESSES*

In C. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of Writing Research*. (pp. 248-262). New York: Guilford.

This chapter examines how technology enhances students' writing. This includes the use of word processing, computer support for planning and revising, assistive technology (spelling checkers, speech synthesis, word prediction, and speech recognition), hypermedia, and computer-mediated communication.

MASON, L.H., HICKEY SNYDER, K., JONES, D.P., & KEDEM, Y. (2006). *TWA + PLANS STRATEGIES FOR EXPOSITORY READING AND WRITING: EFFECTS FOR NINE 4TH-GRADE STUDENTS*

*Exceptional Children*, 73, 69-90

This article presents research on the benefits of expository comprehension and informative writing instruction for fourth-grade students with disabilities, without disabilities, and who were low-achieving. Student performance, as measured by oral and written retells, improved and was maintained, and the students reported liking the instructional strategies.

*MULTICULTURAL READING AND THINKING (MCRAT)*

<http://www.ed.gov/pubs/EPTW/eptw10/eptw10k.html>

MCRAT is a development process designed to help teachers infuse higher-order thinking skills and multicultural concepts into existing curriculum for all students and to measure progress through students' writing.

SADDLER, B., & GRAHAM, S. (2005). *THE EFFECTS OF PEER-ASSISTED SENTENCE-COMBINING INSTRUCTION ON THE WRITING PERFORMANCE OF MORE AND LESS SKILLED YOUNG WRITERS*

*Journal of Educational Psychology*, 97, 43-54.

This article presents research on the benefits of sentence-construction instruction designed to improve skills for more- and less-skilled fourth-

grade writers as compared to peers receiving grammar instruction. Sentence-construction instruction resulted in more adeptness at combining simple sentences into complex sentences, as well as improved story writing and revising skills.

*STRATEGIC INSTRUCTION MODEL (SIM)*

<http://www.kucrl.org/sim/index.html>

SIM, developed at the University of Kansas Center for Research on Learning, is an integrated model to address many of the needs of diverse learners, while helping teachers make decisions about what is of greatest importance, what can help students learn, and how to teach them well.

*WHAT WORKS—ENHANCING THE PROCESS OF WRITING THROUGH TECHNOLOGY: INTEGRATING RESEARCH AND BEST PRACTICE AND BEST PRACTICES FOR EFFECTIVE WRITING INSTRUCTION—ENGAUGE® RESOURCES* (2006)

<http://www.ncrel.org/engage/resource/techno/whatworks/sec2.htm>

This site is designed to help districts and schools plan and evaluate the system-wide use of educational technology.

# Part Three

## Special Education

### (Tertiary Interventions)

#### **PART THREE CONTENTS**

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- *SPECIAL EDUCATION WITHIN AN RTI MODEL, PAGE 3.30*
- *CHANGING STRUCTURES, ROLES, AND RESPONSIBILITIES, PAGE 3.31*
- *METHODS AND PROCEDURES (ACTIVITIES/TOOLS), PAGE 3.33*
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- *ACTIVITY 3.8: STANDARDS FOR JUDGING HIGH-QUALITY SPECIAL EDUCATION, PAGE 3.35*
- *ACTIVITY 3.9: INTERNAL RESOURCES NEEDED TO IMPLEMENT SPECIAL EDUCATION, PAGE 3.36*
- *RESOURCES FOR SPECIAL EDUCATION, PAGE 3.37*

Schools may choose to establish any number of tiers in their service-delivery models. For example, in research on RTI implementation conducted by the National Research Center on Learning Disabilities (NRCLD), two schools reported using a five-tier model in which the fifth tier was not special education. In this illustration of RTI, we are regarding special education services as the final tier of service delivery. These interventions are considered the most intensive available.

#### **BACKGROUND**

“Recent research has suggested the most productive model for improving outcomes for students with learning disabilities is one in which students’ instructional gaps are identified, progress relative to the gaps is monitored, and explicit and intensive instruction provided” (Vaughn & Linan-Thompson, 2003, p. 145). A model requiring this level of intensity and individualization is typically best provided in special education.

In many schools that are organized into multitiered service-delivery systems, the tertiary tier of service may be synonymous with special education. This tertiary level of support and intervention represents an integral step in a multitiered model such as RTI, rather than a last stop or destination for a student who is experiencing school or academic problems. Special education programming and placement become necessary for the student to benefit from his or her educational experiences. As such, special education as the tertiary tier of service is intended to deliver the most intensive, scientifically based instructional programs to address individual student needs. Ideally, this tier is structured to provide flexible service, systematically permitting a student to move in and out of tertiary support as his or her needs change relative to the demands of the general education curriculum (Fuchs & Fuchs, 2006).

# Features

## Definition and Features

### **SPECIAL EDUCATION WITHIN AN RTI MODEL**

In some RTI models, special education services are provided to students with intensive needs who are not adequately responding to high-quality interventions in Tier 1 and Tier 2 and beyond. Decisions about students' specific instructional needs are based in part on a student's lack of responsiveness to effective instruction. Eligibility decisions also are informed by individualized, comprehensive evaluations to determine the specific nature and presence of a learning disability. Special education is a data-based, individualized, iterative intervention. Special education can be defined generally as specially designed instruction to meet the unique needs of students with disabilities. To achieve academic success, students with SLD require intensive, iterative (recursive), explicit scientifically based instruction that is monitored on a continuing basis (Learning Disabilities Roundtable, 2002).

Students with SLD require a continuum of intervention options through general and special education across all grades and ages. The provision of these services can occur through accommodations, modifications, intense instruction, and remediation. Whereas accommodations and modifications are generally provided to help the student with SLD achieve expected outcomes in the general education setting, remediation and the development of compensatory strategies are the focus of special education interventions.

A key distinction between general and special education is that special education takes an individualized approach to instruction (Fuchs & Fuchs, 1995). Interventions in special education must be designed to meet the specific learning and behavioral needs of the student, implemented on a timely basis, provided by a highly qualified teacher or specialist, and monitored to determine progress and achievement of desired outcomes.

In summary, the following are critical features of special education as tertiary intervention in an RTI model:

*Size of instructional group.* Special education instruction is provided to individual students or small groups.

*Mastery requirements of content.* Special education programs, strategies, and procedures are designed and employed to supplement, enhance, and support Tier 1 and Tier 2 and beyond instruction by remediation of the relevant area and development of compensatory strategies. Mastery is relative to the student's functioning and determined by individualized education program (IEP) goal setting and through results of comprehensive evaluation.

*Frequency of progress monitoring.* Continuous progress monitoring informs the teaching process.

*Duration of the intervention.* Special education instruction likely will be considerably longer than the 10 to 12 weeks of supplemental instruction delivered in Tier 2 and beyond.

*Frequency with which the intervention is delivered.* The frequency of special education instruction depends upon student need.

*Instructor qualifications.* Special education teachers deliver the instruction.

*Exit criteria.* Exit criteria are specified and monitored so that placement is flexible.

Specific forms of special education instruction that have been found to be most effective in teaching students with learning disabilities combine direct instruction with strategy instruction (Swanson, 1999). Swanson (1999) identified the main features of this model:

1. Control of task difficulty
2. Small-group instruction
3. Directed questioning and response
4. Sequencing – breaking down the task
5. Drill-repetition-practice
6. Segmentation
7. Use of technology
8. Teacher-modeled problem solving
9. Strategy cues

Of these features, the first three had the most influence on student achievement. Please see the

National Center for Learning Disabilities web site (<http://www.nclld.org/content/view/526/506/>) for the complete review of instructional approaches most effective for students with learning disabilities.

The instruction and progress monitoring provided in Tier 1 and Tier 2 and beyond are an integral part of informing the intervention design and delivery within special education. The progress-monitoring results collected in Tier 1 and Tier 2 and beyond can help frame concerns about a student's

progress. Special educators and related service providers will have thorough knowledge of the instruction and interventions implemented to date and can use that information to design interventions relevant to the student's learning needs. Additionally, general educators will be informed of the types of supports required in the general education classroom as students with SLD receive accommodations, modifications, and remediation specifically designed for their individual needs.

## Changes Changing Structures, Roles, and Responsibilities

Changes are needed in special education. If special education is going to lead to beneficial outcomes for the students with greatest difficulties, then teachers will need to be prepared to provide the most intensive, powerful interventions. Teachers, both entry-level and experienced, will have to receive academic preparation in these methods, which will require that college and university educators are well-versed and able to disseminate information about appropriate instruction and curriculum. Special education will require significant changes to many staff roles and responsibilities and to school structures.

- General and special education must be coordinated as part of a coherent system, which is held accountable for the educational outcomes of students with SLD.
- School staff (general education, special education, administration, and related service providers) work collaboratively in planning and delivering interventions.
- A seamless system occurs when there is alignment of principles, services, assessments, pre-service training, and professional development. (Learning Disabilities Roundtable, 2002)

The roles and responsibilities of various staff members will depend on the methods adopted by a school or district and the available staff. Table 3.3 describes roles and responsibilities in a special education intervention model.

Even with general education and special education working together to ensure a seamless system of high-quality services, the ever-present question remains: What is in the best interests for the student whose response to Tier 1, Tier 2 and beyond, and special education instruction is very limited?

Does that student with such a low response receive tertiary intervention/special education instruction indefinitely? Should that student be returned to the more inclusive general education classroom to receive Tier 1 instruction with some supplemental special education instruction?

We do not have an answer to this question. The literature (Bender, 2002; Tomlinson, 1999) suggests that by differentiating instruction, *all* students can benefit from instruction. IDEA 2004 specifies that schools must comply with providing a free appropriate public education (FAPE), wherein the school provides special education and related services at no cost to the child or her or his parents. We suggest that at a minimum, schools put in place procedures to document instruction and adequately monitor individual student progress in special education. For those students who are not as responsive as desired, one must carefully consider all of the options available, including changes in targeted outcomes and alternative placements that could provide more intense interventions.

Table 3.3. Special Education Changing Roles

General Education*	Specialist/Support Staff*	Administration*
<p>Implement Tier 1 level instruction with fidelity</p> <p>Conduct progress monitoring of all students, including those in special education</p> <p>Depending on a student’s IEP, provide appropriate accommodations or modifications for students in special education</p>	<p>Provide specially designed instruction to individuals or small groups</p> <p>Provide consultation regarding behavioral and instructional problems</p> <p>Provide expertise and guidance to parents, educators, and administrative faculty as members of the school-based support team</p> <p>Monitor progress of students within special education and analyze results for consideration of continuation of intervention, exit, or changes in intervention</p> <p>Collaborate with general education teacher to develop appropriate accommodations/modifications that can be embedded within Tier 1 to provide additional support to targeted students</p>	<p>Develop and oversee school-based instructional support team efforts</p> <p>Provide a supportive school environment that encourages collaboration</p> <p>Provide continuing, high-quality professional development to all instructional and support personnel</p> <p>Ensure adherence to timelines and cost controls</p> <p>Provide caseloads and schedules that facilitate individualized instruction, documentation of response to instruction, and collaboration among general and special educators, related services, and support personnel</p>

\* General Education includes the general education teacher

\* Specialist/Support Staff includes the special education teacher, reading or learning specialists, related services personnel, paraprofessionals

\*Administration includes building principals and assistants as well as curriculum or assessment specialists at building or district levels



# *Activities/Tools*

## *Methods and Procedures*

The following activities (*Activity 3.7: Essential Task List for Special Education*, *Activity 3.8: Standards for Judging High-Quality Special Education*, and *Activity 3.9: Internal Resources Needed to Implement Special Education*) provide ways for your organization to think about implementing special education in a multitiered RTI service-delivery model.

# Activity 3.7

## *Essential Task List for Special Education*

Directions: In the second column, write the name of the individual or team who will assume responsibility for the task identified in the first column. In the third column, write the deadline for or status of the task. Complete each task identified.

Task	Responsible Individual/Team	Timeline/Status
Identify the structure or make-up of problem-solving team.		
Select resources, curricula, and interventions for use for certain learning disabilities.		
Create and continue the development, individualization, and intensity of interventions to support specific student needs (how often, how long).		
Develop a process for general and special education teachers to discuss student data, concerns, and needs.		
Schedule time for collaboration among general and special education teachers.		
Develop ways to work as a team to deliver a comprehensive program of accommodations, modifications, or remediation to the targeted student.		
Develop decision rules (cut scores, exit criteria) for students remaining in or moving out of special education.		
Implement a system of data-collection and progress monitoring for special education to determine level and growth rate (see Section 2: Progress Monitoring for more information).		
Provide professional development opportunities for interventions with demonstrated effectiveness for students with SLD.		
Identify measures and procedures to document fidelity of implementation of interventions.		
Develop a team of experts who use data to determine whether and when changes in individual student instruction is needed.		
Identify a team of experts who know which instruments and curriculum options are most likely to result in student improved outcomes.		

# Activity 3.8

## Standards for Judging High-Quality Special Education

Directions: Read each of the standards, which have been identified as mechanisms for judging high-quality special education interventions. The checklist is formatted so that you can indicate current and planned implementation.

- If the practice has been implemented, indicate that with a checkmark (√).
- If the practice is being developed, rank its priority: 1 = highest priority through 3 = lowest priority.

Standard	Status	
	In Place (√)	Priority (1-2-3)
Special education interventions are based on research for which citations can be provided.		
In addition to Tier 1 instruction, students in special education meet for a minimum of two 30-minute sessions each day for at least nine to 12 weeks.		
At least one special education intervention cycle occurs per semester.		
Size of instructional group is no more than a one-to-three teacher-to-student ratio.		
Decisions about students repeating or continuing the special education intervention cycle are based on progress-monitoring data and achievement of individualized education program (IEP) objectives.		
Students may exit from special education intervention during the middle of the school year only if they demonstrate grade-level performance on specified benchmarks or progress measures.		
A student who has received previous special education instruction at the tertiary tier level and has exited may re-enter special education as needed.		
Interventions in special education employ a combination of direct instruction and compensatory strategy instruction designed to remediate a student's targeted area of deficit.		

(Mellard & McKnight, 2006; NRCLD, 2005)

# Activity 3.9

## *Internal Resources Needed to Implement Special Education*

Directions: In *Activity 3.8: Standards to Judge High-Quality Special Education*, you identified which special education intervention standards had been implemented in your organization and which standards still need attention. In the space below, list the resources (material, curriculum, space, equipment, and people) your organization will need to effectively implement the standards.

Material/Curriculum	Space/Equipment	People

# Resources

## Resources for Special Education

We have compiled a brief (but not exhaustive) list of materials available to help inform educators at the special education level. NRCLD does not endorse these products. These resources are intended to be a source of information about programs and publications that will help teachers, principals, and district personnel choose materials that can be used by skilled teachers to provide effective instruction and successfully implement an RTI program. Whether or not a program or publication has been listed does not constitute endorsement or lack of endorsement by NRCLD. These resources do not constitute an “approved” or “required” list. Also, many potentially useful programs or publications may not be listed here. We hope that readers will complete careful reviews of available alternatives.

*DIRECT INSTRUCTION (SRA/MCGRAW HILL)*  
[www.sra4kids.com](http://www.sra4kids.com)

SRA *Direct Instruction* Reading, Language Arts, and Math programs were designed to positively change the course of a student’s life. The company says every aspect of these programs has been developed, tested, and refined to ensure that it helps students learn effectively.

*EARLY INTERVENTIONS IN READING: PROACTIVE (SRA/MCGRAW HILL)*  
[www.sra4kids.com](http://www.sra4kids.com)

*Early Interventions in Reading* (EIR) is a program heavily correlated with the Open Court Reading system teaching children to identify the 42 phonemic statements presented in the Open Court reading system. *Proactive Reading* has been demonstrated through multiple research studies to be a highly effective intervention, especially for students who experience difficulty in learning to read. The curriculum is published under the name *SRA’s Early Interventions in Reading*.

*GUIDED READING (HEINEMANN PRESS)*  
<http://books.heinemann.com/search/default.aspx>

Authors Gay Pinnell and Irene Fountas wrote *Guided Reading* for grade K-3 educators and administrators. The book explains how to create a balanced literacy program based on guided reading and supported by read aloud, shared reading, interactive writing, and other approaches.

*INTENSIVE PHONOLOGICAL AWARENESS PROGRAM (SCHUELE & DAYTON, 2000)*  
<http://wvde.state.wv.us/reading/phonological.html>

The *Intensive Phonological Awareness Program* is a West Virginia Department of Education initiative. It focuses on early literacy skills at the kindergarten and first grade levels using school-based teams trained to implement intensive phonological awareness intervention for students who have low early literacy skills and to provide daily phonemic awareness instruction to kindergarten children.

*INTERVENTIONS FOR STUDENTS WITH LEARNING DISABILITIES [NEWS DIGEST 25]*  
<http://www.nichcy.org/pubs/newsdig/nd25txt.htm>

National Dissemination Center for Children with Disabilities (1997).

*LANGUAGE ARTS MULTI-SENSORY PROGRAM (LAMP) (ABBOTT, 2002)*  
<http://www.jgcp.ku.edu/Faculty/Abbott-Bio.htm>

The *Language Arts Multi-sensory Program* is a three-level intensive reading program for students with the most severe reading challenges. LAMP is a one-on-one (or small group) direct instruction intervention that promotes the use of kinesthetic and tactile experiences. There are two levels of teacher manuals and student workbooks. Contact Mary Abbott for additional information.

*NCITE RESEARCH SYNTHESIS: READING AND DIVERSE LEARNERS*

<http://idea.uoregon.edu/~ncite/documents/techrep/other.html>

National Center to Improve the Tools of Educators (NCITE) (2006).

*PROGRAMMED READING (PHOENIX LEARNING SYSTEMS)*

[http://www.learnoreadonline.com/how\\_work/index.shtml#aboutprogrammed](http://www.learnoreadonline.com/how_work/index.shtml#aboutprogrammed)

LearnToReadOnline's *Programmed Reading* has been extensively researched and adapted for online learning from the print version published by Phoenix Learning Resources. There are provisions for moving ahead at one's own pace or repeating material as needed. Learned material is systematically woven into newer material in a way that has students respond to familiar material while being introduced to new material.

*READ WELL K-1 (SOPRIS WEST)*

<http://www.readwell.net/overview.asp>

Written by Marilyn Sprick, Lisa Howard, and Ann Fidanque, *Read Well* is a research-based reading program that combines systematic phonics, mastery-based learning, and rich content. Published by Sopris West Educational Services.

*REPEATED READING (HARRIS & SIPAY, 1990)*

*Repeated Reading* is a procedure that is used to develop reading fluency. With this procedure, a student reads a short passage several times until the fluency rate is determined to be satisfactory for the passage (i.e., a criterion has been reached). This technique is then repeated with a new passage.

*RESEARCH: KEYS TO SUCCESSFUL LEARNING KEYS TO SUCCESSFUL LEARNING [REPORT]*

<http://www.nclld.org/content/view/526/506/>

National Center for Learning Disabilities (2006).

*ROAD TO THE CODE (BROOKES)*

[http://www.hickman.k12.ca.us/grue/Road\\_Code,%20K-1%20book.pdf#search=Road%20to%20the%20Code](http://www.hickman.k12.ca.us/grue/Road_Code,%20K-1%20book.pdf#search=Road%20to%20the%20Code)

*Road to the Code* is an 11-week program for teaching phonemic awareness and letter-sound correspondence to kindergartners and first-graders who are having difficulty with their early literacy skills.

*SAXON PHONICS (SAXON PUBLISHERS)*

<http://saxonpublishers.harcourtachieve.com/en-US/Products/default.htm?Catalog=Harcourt%20Achieve%20Catalog&Category=SaxonPhonicsSpelling&CatalogNavigationBreadcrumb=Harcourt%20Achieve%20Catalog;SaxonPhonicsSpelling>

The *Saxon Phonics* series builds on a student's prior learning. New learning is presented in increments, and each increment is reviewed throughout the year, providing the exposure needed for the student to achieve reading goals.

*SHARED READING (HOLDAWAY, 1979)*

[http://www.eduplace.com/rdg/res/literacy/em\\_lit4.html](http://www.eduplace.com/rdg/res/literacy/em_lit4.html)

The shared reading model builds from research indicating that storybook reading is an important factor in children's reading development. The shared reading model often uses big books with enlarged print and illustrations so that as the children are being read to, they can see and appreciate the print and illustrations.

*SOUND PARTNERS (SOPRIS WEST)*

*Sound Partners* originally targeted first-grade students, although the program has also been used for older students. Students are assessed on word attack, word identification, and other skills.

*SRA READING MASTERY (SRA MCGRAW HILL)*

[www.sra4kids.com](http://www.sra4kids.com)

The company describes *Reading Mastery Classic*—a phonemically explicit, intensive approach for teaching beginning reading—as effective at providing positive outcomes with at-risk children.

# Parents

## Parent Involvement

### **PART FOUR CONTENTS**

- *BACKGROUND, PAGE 3.39*
- *METHODS AND PROCEDURES (ACTIVITIES/ TOOLS), PAGE 3.41*
- *RESOURCES FOR PARENTAL INVOLVEMENT, PAGE 3.43*

### **BACKGROUND**

Parent involvement in a tiered service-delivery model, or any service-delivery system, should be characterized by consistent, organized, and meaningful two-way communication between school staff and parents with regard to student progress and related school activities. Through this communication, parents are enabled to play an important role in their child's education by assisting in the learning and by being involved in decision making as it affects tier-level instruction to increase their child's achievement.

Parents should receive information that discusses provisions of the Individuals with Disabilities Education Improvement Act of 2004, noting that IDEA 2004 does not specify that their state or local school must implement an RTI model. What the law does say is that districts "may use a process that determines if the child responds to scientific, research-based intervention as part of the evaluation process..." (IDEA 2004; Learning Disabilities Association of America, 2006).

Within IDEA 2004 (Public Law 108-446), we find the following information related to parent involvement:

#### **SEC. 615. PROCEDURAL SAFEGUARDS**

- "... either a parent of a child, or a State education agency, other State agency, or local education agency may initiate a request for an initial evaluation to determine if the child is a child with a disability."

Sec. 614 (a) (1) (B)

#### **SEC. 614. EVALUATIONS, ELIGIBILITY DETERMINATIONS, INDIVIDUALIZED EDUCATION PROGRAM AND EDUCATIONAL PLACEMENTS**

- "Establishment of Procedures--Any State educational agency, State agency, or local educational agency that receives assistance under [Part B] shall establish and maintain procedures in accordance with this section to ensure that children with disabilities and their parents are guaranteed procedural safeguards with respect to the provision of a free appropriate public education by such agencies."

Sec. 615 (a)

- "... procedural safeguard notices shall include a full explanation of the procedural safeguards ... relating to independent educational evaluation; prior written notice; parental consent; access to educational records; the opportunity to present and resolve complaints; ... the child's placement during pendency of due process proceedings; procedures for students who are subject to placement in an interim alternative educational setting; requirements for unilateral placement ...; due process hearings ...; civil actions ...; attorney fees."

Sec. 615(d) (2) (A-K)

In a school setting that is implementing a tiered RTI model, parents should expect to receive information about their children's needs, the interventions that are being used, who is delivering the instruction, and the academic progress expected for their child. Frequent communication with the school, receipt of regular progress (or lack of progress) information, and participation in decision making should provide parents the information needed to determine whether their child should be referred for a special education evaluation (LDA, 2006).

In schools that are preparing to implement a tiered RTI model, parents may find it useful to pose the following questions to administrators and teachers:

- What are the provisions for including parents in the school planning process?

- What are the provisions for ensuring that parents are involved in all phases of planning the RTI interventions for their child?
- How much time must be spent in each tier to determine whether the intervention is working?
- What kinds of written materials will parents receive informing them they have the right to ask for a special education evaluation at any time?

The following provides a list of standards for judging parent involvement in a tiered service-delivery model (Mellard & McKnight, 2006).

- Standards for parent involvement are aligned with IDEA 2004 statutes (and regulations when available) (e.g., due process, hearing, and placement decisions).
- Parental notification includes a description of the problem; clear, unambiguous documentation that shows the specific difficulties the child is experiencing; a written description of the specific intervention and who is delivering instruction; a clearly stated intervention goal; and a long-range timeline for the plan and its implementation.
- Parents and staff reach mutual agreement on the implementation, plan, and timeline.
- Parents frequently receive progress data.
- Parents are actively supported to participate at school and at home.
- Parent questionnaires and surveys assure parents that the school values their opinions.
- Parent questionnaires and surveys assure school staff that parents find school staff and school programs (e.g., interventions and instruction) to be of high quality.
- Parents view the implementation of due process procedures and protections as timely, adequate, and fair.
- School staff members strive to help parents feel welcome, important, and comfortable in the school setting.

The following measures can be used to judge parent involvement (Mellard & McKnight, 2006).

- Track the amount of parent-staff communication to ensure it is consistent and frequent.
- Track problem notification to ensure that it includes a clear and specific description of the problem and a written description of the intervention, the intervention goal, and the timeline.
- Note practices that encourage parents to participate in their child's learning at school and at home and give them support in this effort.
- Track the opportunities given to parents to complete questionnaires and surveys about the quality of school staff and education programs.
- Note practices that make parents feel comfortable about expressing their ideas and concerns and ensure parents that their opinions are valued by school staff.
- Check that practices to keep parents well informed about due process procedures are in place and that parents find the procedures fair, timely, and adequate.



# Activities/Tools

## Methods and Procedures

### **FOR SCHOOL STAFF—PARENT NOTIFICATION**

A chart or diagram with clearly stated times for parents to be notified ensures consistent practices within a school. This chart or diagram clearly shows that parents should be and are notified when a child is placed in a group intervention after screening, when a child is placed in a second intervention after showing inadequate response to the first intervention, when a child continues to show inadequate response and is given an individual intervention, and when a special education referral is initiated (Sadler & Zinn, 2005).

### **FOR SCHOOL STAFF—DOCUMENTATION**

The documentation of each communication between school staff and parents and each time a parent participates in a meeting or other relevant school activity provides important information for all staff members.

### **FOR PARENTS—WRITTEN EXPLANATION OF SCHEDULED MEETING**

Before any parent-staff meeting, it is helpful if parents receive a friendly and easily understood written explanation of what will take place at the meeting, the goal of the meeting, and who will be in attendance (Bateman & Linden, 1998). A follow-up telephone call to answer any questions or concerns also is helpful.

### **FOR PARENTS—LISTS OF QUESTIONS**

Although parents may be unclear about many aspects of their child's academic work and progress, parents often have difficulty knowing exactly what questions to ask. It is also important that parents have

enough information to assist in their child's learning and be involved in the decision-making process. The Exceptional Children's Assistance Center (ECAC) has created attractive and user-friendly lists of questions that parents might want to ask about topics such as reading progress, word recognition, fluency in reading, reading comprehension, etc. The questions are followed by clearly marked areas in which parents can write their answers (ECAC, 2006). Table 3.4 on page 3.42 provides examples from materials and procedures that promote parent involvement.

### **INFORMATION SHEETS FOR PARENTS**

Understanding terminology that is often used during meetings can be difficult for some parents. The ECAC has created a one-page sheet with a list of words that parents might expect to hear at an education-related meeting. After each word is a simple explanation of that word. For example, reading fluency is explained as "the ability to read a text accurately and quickly, often with expression" (ECAC, 2006).

### **TIPS FOR PARENTS**

Some parents may need specific suggestions and procedures to assure enhanced participation in their child's learning experiences. Single sheets with easy-to-understand tips on helping a child read can help to give parents the information and confidence they need. Such topics might include *Reading Aloud to Your Child*, *How to Know Whether a Story is Too Difficult for Your Child*, and *Working with Rhymes*. The ECAC provides tips such as these (ECAC, 2006).

Table 3.4. Supporting Parent Involvement

***Questions Parents Can Ask series (ECAC, 2006)***

Documents created through a collaborative effort by parents, educational consultants, teachers, professors from UNC Chapel Hill and UNC Charlotte, and ECAC staff. Funding for this series was provided by the North Carolina State Improvement Project, Public Schools of North Carolina, Exceptional Children Division.

***Questions Parents Can Ask . . . About Reading Improvement***

The document contains a brief explanation for parents about asking the listed questions and follows each question with a designated answer space.

The following questions are examples of those included in this publication:

- What is my child's grade level in reading?
- What does that mean he or she can do?
- Where does he or she need to improve?
- Is there a difference between how well my child reads individual words and how well he or she understands what he or she reads? If so, what can we do to improve the weaker areas?
- What kinds of things are you doing to help my child succeed in reading (such as providing support by a reading specialist and providing different materials)?
- What can I do at home to help my son or daughter read well?

# Resources

## *Resources for Parental Involvement*

### *EXCEPTIONAL CHILDREN'S ASSISTANCE CENTER (ECAC)*

*www.ecac-parentcenter.org*

This center, an example of a full-service Parent Training and Information Center, serves families in North Carolina at no charge. Its web site is filled with information for parents as well as suggestions and materials that schools can use when working with parents. Packets of information (free to those in North Carolina) can be purchased for a nominal fee by individuals in other states.

### *LD ONLINE*

*www.ldonline.org*

This web site, which focuses on learning disabilities, has a separate section for parents. This section provides information to 1) help parents support their child at home and at school and 2) understand their rights and responsibilities.

### *NATIONAL CENTER FOR LEARNING DISABILITIES*

*www.nclld.org*

This center works to ensure that individuals with learning disabilities have every opportunity for success and that parents have information that is essential for taking effective action on behalf of a child with a learning disability.

### *SCHWAB LEARNING – A PARENT'S GUIDE TO HELPING KIDS WITH LEARNING DIFFICULTIES*

*www.SchwabLearning.org*

Created to help parents, this nonprofit organization is dedicated to providing reliable, parent-friendly information.

### *TECHNICAL ASSISTANCE ALLIANCE FOR PARENT CENTERS*

*http://www.taalliance.org/centers/index.htm*

Each state has at least one Parent Training and Information/Community Parent Resource Center funded by the Office of Special Education Programs in the U.S. Department of Education. These centers provide training and information to parents of children with disabilities.

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