72 Best Practices on Interventions for Students With Reading Problems

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OVERVIEW

According to the National Assessment Education Progress Report, 38% of fourth graders and 29% of eighth graders are reading below basic levels (National Center for Education Statistics, 2005). These figures are even more alarming for states where there is an increased number of students who are receiving free or reduced lunch. Thus, a considerable number of the nation's pupils have not acquired basic reading skills, although reading is certainly one of the most fundamental skills that permit a person to survive and thrive in an ever-growing technological society. Essentially, one of the main goals of education is to help students move from a learning-to-read stage to a reading-to-learn stage.

Despite general forms of instruction, some individuals have difficulty acquiring the fundamental reading skills necessary to be in a position to *read to learn*. Often, these youngsters are referred to school psychologists because of their reading difficulties. Many of these students' needs are unmet due to insufficient types and amounts of reading instruction. Moreover, in many cases, students' needs are not adequately identified because school psychologists and educators spend considerable time generating circular reasons as to why a particular student has difficulties learning to read. For example, many professionals provide rationales such as, "Johnny has a reading problem because he has a learning disability" or "Sally has a reading problem because she is dyslexic." Instead, professionals' time might be better spent targeting reading skill areas that are in need of intervention or further instruction.

According to *School Psychology: A Blueprint for Training and Practice III* (Ysseldyke et al., 2006), school psychologists are expected to demonstrate competencies in helping students develop cognitive and academic skills through data-based decision-making activities. Science-based practice (such as that discussed by Tilly, chapter 2, vol. 1) should be applied when assessing and identifying reading problems and targeting instruction that matches students' reading needs. Tilly suggests that we first define the problem as the difference between an institution's or referral source's (e.g., school district's benchmark criteria, teacher's, or parent's) expectations for reading achievement and a student's actual reading performance. For example, if Jane is reading 30 words correctly per minute during oral reading of passages, and benchmark standards indicate that she should be reading 90 words correctly per minute, a discrepancy of 60 words read correctly per minute exists. Once the problem has been identified and expressed in the difference between expectations and actual performance, the problem needs to be analyzed in terms of what is causing Jane to read only 30 rather than 90 words correctly per minute. It may be discovered that Jane has only been provided one opportunity to orally read passages during each school day. Therefore, the intervention may be to increase Jane's opportunities to orally read passages to increase her rate of reading words correctly per minute. Her progress in achieving this expectation can be assessed using curriculum-based oral reading passage measurements. This method of identifying a problem and targeting instruction is a solution-focused one.

Therefore, the first major aim of this chapter is to describe a three-tired instructional context by which a

process takes place involving matching students' reading needs with instruction, implementing reading instruction, and evaluating the effects of the instruction to determine if the match was effective for helping students make sufficient progress. The second major focus of this chapter is to present various evidence-based general and specific reading interventions that are aimed at addressing particular skill needs within the domain area of reading.

BASIC CONSIDERATIONS

Learning most often occurs within a stimulus, response, and consequence paradigm. For instance, teachers instruct or present content to occasion a response, a response(s) is emitted, and a consequence (e.g., feedback or reinforcement) is provided. Interventions can be considered either as stimuli or as consequences. For instance, the stimulus may be either a teacher demonstrating how to make letter–sound correspondences while helping students read a word, providing verbal prompts to encourage students to answer comprehension questions, or providing timed oral reading practice drills. The consequence may be providing verbal praise for applying the strategies and reading words correctly, or it may be giving corrective feedback such as word supply for reading words inaccurately. It would then seem very logical to carefully examine the stimulus, response, and consequence if learning is not occurring or if learning is occurring at a less than optimal level. The relationships among a stimulus, response, and consequence are usually examined when reference is made to exploring ecological or environmental factors associated with learning. This certainly pertains to developing reading skills. By examining a stimulus, response, and consequence paradigm within the context of reading skill lessons, professionals proactively engage in helping children achieve their reading performance goals.

Three-Tiered Response-to-Intervention Model

Response-to-intervention (RTI) models advocating for a multitiered system of delivering and evaluating instruction essentially are based in principle on the relationships among a stimulus, response, and a consequence paradigm. In particular, RTI models that consist of a three-tiered service delivery system have been suggested for assessing the types and intensity of interventions that are needed to help children make sufficient progress in their reading skills (Brown-Chidsey & Steege, 2005; Vaughn & Klingner, 2007). The three-tiered service delivery system often involves the implementation and evaluation of primary, secondary, and tertiary interventions (Vaughn & Klingner, 2007). Across the tiers, it is strongly recommended that educators implement scientifically supported instructional methods with fidelity to increase the likelihood that students will respond favorably to instruction (i.e., improve their reading performance). Preliminary research suggested that students who struggled acquiring reading skills tended to respond more favorably to Tier 2 and 3 interventions if they received scientifically supported Tier 1 instruction (Vaughn, Wanzek, Woodruff, & Linan-Thompson, 2007).

The first tier involves providing evidence-based reading instruction that is based on the school's core reading curriculum and that is aimed at meeting the needs of all of the students in the classroom at large. Examples of first-tier instruction may be the Peer Assisted Learning Strategies (PALS) program (Fuchs, Fuchs, Mathes, & Simmons, 1995) and Reading Mastery (Englemann & Bruner, 1988), which are described in a subsequent section of this chapter. Progress in reading achievement is determined, and benchmarks on expected performance are derived, by assessing the reading performance, at a minimum, in the beginning, middle, and end of the school year on every student in the class using reliable and valid curriculum-based measures (e.g., AIMSweb or DIBELS; for a thorough discussion of curriculum-based measures and how they are linked to targeting instruction, see Hosp & McConnell, chapter 22, vol. 2; Howell, chapter 23, vol. 2; Howell, Hosp, & Kurns, chapter 20, vol. 2).

Generally speaking, students who are performing at the bottom 25% of the class on these measures may need to be provided with Tier 2 interventions. Tier 2 interventions may consist of targeted programs and strategies that address specific needs by supplementing more intensively the instruction that students received from the core curriculum presented to the class at large in Tier 1. In other words, these students may need intervention services that are more focused and that are typically delivered in small group contexts to meet the common academic needs of a small group of students. Oral reading activities such as listening while reading and simultaneous verbal prompting (described subsequently in this chapter) are evidence-based interventions that may be easily implemented within a small group context. In Tier 2, progress monitoring occurs on a more frequent basis than it did during Tier 1. If students

are not making adequate progress under Tier 2 services despite several attempts to implement and test the effectiveness of modified or alternative interventions, Tier 3 types of intervention services may be delivered. Tier 3 services consist of specifically designed reading instruction and may involve even more intensive individualized instruction that may occur within the context of extended instructional time, increased opportunities to practice skills, and a one-to-one instruction format. Examples of Tier 3 types of interventions may be using sound boxes to teach phonemic awareness skills and implementing repeated readings with phrase drill error correction to develop fluency. Data may be gathered daily to chart progress and responsiveness to intervention.

Instructional effectiveness is continually evaluated throughout each tier of the model, and decisions based on summative and formative assessment data are made across the three-tiered process. Summative assessment data are gathered more frequently and are used to determine if changes in instruction need to be made. For instance, students may move from a Tier 3 level of instructional support to a Tier 2 or vice versa based on the level at which they are performing a skill. Formative assessment data are used to determine when a student has mastered essential skills and whether intervention needs to continue or is no longer required. As indicated in *Blueprint III*, engaging in this form of data-based decision making is considered best practice for meeting the instructional needs of students.

Instructional Effectiveness and Efficiency

Instructional effectiveness can be defined as instruction that produces desirable levels of accurately performing an academic skill. While it is necessary to determine whether or not instruction is effective, it may not be sufficient given the time constraints to provide instruction in a given school day. Therefore, determining if instruction is efficient for achieving desired outcomes may be as critically important if achievement goals are to be realized by the end of a given school day, week, month, and, ultimately, an academic year. Instructional efficiency can be defined as instruction that produces high rates of performing an academic skill accurately (Skinner, Belfiore, & Watson, 2002). Stated another way, instructional effectiveness and efficiency can be determined by assessing how well children are responding to interventions by measuring the accuracy and rate of their responses, respectively.

In one pioneer study, three types of spelling instruction methods (interspersing a high percentage of unknown to a low percentage of known words, interspersing a low percentage of unknown to a high percentage of known words, and a traditional drill-and-practice method of teaching 100% unknown words) were compared in relation to whether they were similarly effective and efficient for achieving desired spelling skill outcomes (Cates et al., 2003). The time period by which each type of instruction method was implemented was recorded in seconds from start to finish using a stopwatch. Instructional effectiveness was measured by calculating the number of words students learned to spell accurately under each instructional condition. Instructional efficiency was measured by calculating the number of words students learned to spell accurately under each instructional condition divided by the time in seconds it took to implement the respective instructional methods. In other words, instructional efficiency examines the rate at which students are learning new content under an instructional condition. The researchers found that all three methods were equivalent in helping children spell words accurately. However, these researchers found that a traditional drill-and-practice method of teaching 100% unknown words was the most efficient with regard to helping students spell more words accurately per minute of instructional time. When this study was systematically replicated to examine accuracy and rate of reading words per minute of instructional time, the same findings prevailed, indicating that traditional drill and practice of teaching children to read 100% unknown words was the most efficient procedure (e.g., Joseph & Nist, 2006; Joseph & Schisler, in press; Schmidgall & Joseph, 2007). The majority of reading instruction research explores whether or not instruction is effective; however, very few studies have explored whether or not instruction is efficient at producing desirable outcomes. Thus, instruction can be considered evidenced based if it is effective and efficient for achieving goals.

Teachers may consider effectiveness and efficiency variables when selecting interventions (Vaughn et al., 2000). For instance, there may be situations when efficiency variables are critical, such as working to help children achieve desired reading achievement goals within a month or a few weeks at the end of the school year. In these situations, school psychologists and educators may work collaboratively and time an instructional lesson from start to finish while collecting data on students' rate of learning so they are in a position to select the most efficient instructional method

or technique for accomplishing the desired reading achievement goal. Of course, this process needs to occur within the context of matching instruction to meet students' needs.

Matching Instruction to Student Needs

Before describing critical component reading skills and general interventions as well as specific reading instruction techniques and programs, it is critical to describe a model for selecting interventions that directly address the level of learning at which to begin instruction with an individual student or group of students. Stated another way, matching instruction to individual needs is critical when targeting interventions for students who experience difficulty reading. An instructional hierarchical model of teaching and learning skills can be effectively used to match instruction to individual students' needs (e.g., Daly, Lentz, & Boyer, 1996).

Instructional Hierarchy

The instructional hierarchy proposed by Haring, Lovitt, Eaton, and Hansen (1978) consists of the following phases of teaching and learning: acquisition, fluency, generalization, and adaptation. Recently, Daly, Chafouleas, and Skinner (2005) applied this hierarchy to teaching children how to read. When students are in the *acquisition* phase of learning, they are beginning to learn skills and apply them to content so that they produce accurate responses. Instructors are teaching students how to perform skills using particular content by modeling, demonstrating, prompting, correcting errors, and providing other forms of feedback for student responses. In the case of reading, for instance, students may learn that, in general, the first vowel sound is pronounced when two vowels are placed adjacent to one another. Stated another way, students are taught that "when two vowels go walking, the first one does the talking." Children begin to apply this skill when they read words that contain this type of spelling pattern. Initially, children may work at accurately reading a set of 20 words with these vowel combinations. The *fluency* phase is depicted as the phase by which students can produce accurate responses but do not execute them in a quick, effortless manner. In other words, they read words correctly but slowly. In this phase, teachers incorporate plenty of opportunities for drill and practice of skills under timed conditions to facilitate production of accurate responses in an efficient (timely) manner. Using the previous example, students may be asked to repeatedly read the set of 20 words containing adjacent vowel combinations under predetermined time constraints to promote quick, effortless, or automatic responses. In this phase of teaching and learning, corrective feedback is usually provided after students have made several responses or completed a couple of timed drill-and-practice trials (Daly et al., 2005).

The next phase in the hierarchy, *generalization*, actually can be integrated into lessons that are aimed at promoting accuracy and fluency (Daly et al., 2005). Teachers can facilitate generalization by teaching the application of skills in various contexts. Children can learn to read words with adjacent vowel combinations in narrative and expository textual genres. This can be achieved by exposing students to many contexts in which particular content is encountered and certain skills are used. This can also be achieved by giving students opportunities to practice that skill in those multiple contexts. For instance, students can be taught to read the set of 20 words with adjacent vowel combinations on a list or within the context of a sentence, paragraph, or poem.

The last phase in the hierarchy is *adaptation*. In this phase, students learn to adapt the skills they learned by applying them to new content. Teachers can facilitate this learning phase by providing tasks that promote transfer of the same skill to different content. For example, students learn to apply the pronunciation of adjacent vowel sounds within the set of 20 words they mastered to a newly introduced set of words or to longer words containing those vowel combinations.

School psychologists and educators can ascertain at which phase within the instructional hierarchical model the students are operating through three-tiered RTI data-based gathering activities. During assessment of skills, an instructor or school psychologist may discover that some students are able to read words accurately during oral reading but read them very slowly at an average rate of 30 words per minute. In this case, the acquisition phase of instruction does not appear to be the most efficient way of helping these students make progress. Rather, interventions designed to increase fluency need to be implemented because they will most directly meet the students' current learning needs. An example of targeting students' needs using various instructional methods (described subsequently in more detail) across a three-tiered service delivery model and across the instructional hierarchy is presented in Table 1.

Table 1. Example of Targeting Students' Reading Skill Needs Across a Three-Tiered Model of Service Delivery and Acquisition and Fluency Learning Levels

Tier 1 instruction	Tier 2 instruction	Tier 3 instruction
• Reading Mastery to a classroom of students. • *Acquisition:* 100% of students read words accurately as assessed by CBM. • *Fluency:* 80% of students demonstrated oral reading fluency as assessed by CBM.	• Choral repeated reading with phrase drill for a small group of students (20% who were not reading fluently under Tier 1 instruction). • *Acquisition:* 100% of students read words accurately as assessed by CBM. • *Fluency:* All but two students read words fluently as assessed by CBM.	• Listening while reading, increased opportunities to repeat readings with phrase drill during one-to-one instruction for two students who did not achieve goals under Tier 2. • *Acquisition:* 100% of students read words accurately as assessed by CBM. • *Fluency:* 100% of students read words fluently as assessed by CBM.

BEST PRACTICES

This section first describes general interventions or effective components of instruction that have been found to be effective for teaching reading. Critical literacy skills are described as well as specific techniques that are aimed at developing those skills and evidence-based reading instruction programs.

General Interventions

This section presents general interventions that can be applied across various academic skills and most certainly reading skills. General interventions that have been proven to be effective for improving reading skills include direct instruction components of modeling/demonstration, prompting, correcting errors, providing plenty of opportunities to respond, repeated practice, and shaping and reinforcing responses. As each instructional component is systematically implemented, student performance is monitored. Components that facilitate progress remain in a student's program while components that produce minimal or no effects are removed.

Modeling/Demonstration

Children of all ages observe various behaviors exhibited by adults and peers and engage in imitating that behavior. Therefore, it is important for parents and teachers to model appropriate reading behavior. McCurdy, Cundari, and Lentz (1990) found that children improved their oral reading skills by observing an individual read a passage proficiently. Particularly, students improved their reading skills when they have attentively listened to and followed along as a teacher or more capable peer read (e.g., Knapp & Winsor, 1998). This listening while reading technique is described below under developing fluency skills.

Although modeling proficient reading is critical and can be very influential, it cannot be assumed that this behavior will be imitated. Therefore, teachers need to demonstrate (make explicit) reading proficiently so students learn how to perform this behavior. Essentially, educators can demonstrate reading by simultaneously explaining and showing an individual how to read. When demonstrating how to read a story, teachers may verbalize the process by stating that they are positioning a book right side up and are reading the title. They then state that they are going to turn the page and begin reading the printed words by first reading the word that is written on the first line at the far left corner of the page and then proceeding to read the rest of the words until they reach the far right corner of the page and then will sweep down to the far left corner of the next line of printed words. As they attempt to read the words, they may even demonstrate how they are going to attempt to sound out a word they do not know by making one-to-one letter–sound correspondences. After they read a page in the book, they may ask the students to read the next page and observe the students' behaviors and offer them feedback. The act of demonstrating reading behaviors such as in this example likely served as a prompt to occasion a response from the students (Skinner, Logan, Robinson, & Robinson, 1997).

Prompting and Error Correction

Verbal prompts can be used to help students read words correctly. Verbal prompts can often be used as a way to scaffold (i.e., providing assistance and gradually removing that assistance as skills are independently executed) appropriate reading behaviors (Carnine, Silbert, Kame'enui, & Tarver, 2004). For instance, when a student encounters a word he or she does not know how to read, the teacher may verbally prompt the student to

attempt to read the word by saying, "Now, let's examine the word carefully. The word begins with the letter *m* and the *m* makes the sound of _____." Then the teacher allows the student to articulate the sound. Verbal prompts like this are provided until the students can read the word correctly. Verbal prompts of this nature are usually faded when the student becomes more proficient at reading words and using word attack strategies for attempting to read unknown words to him or her. Prompting can lead students to not only attempt content that is unknown to them but also can help correct their mistakes. Mispronunciations such as substitutions, insertions, nonwords, and word reversals are often referred to as miscues in scientific and practical reading literature. When students make errors during reading, it is recommended that they be immediately and systematically corrected (Barbetta, Heron, & Heward, 1993; Barbetta, Heward, Bradley, & Miller, 1994; Nelson, Alber, & Grody, 2004; Pany & McCoy, 1988). After students correct their errors, they should engage in repeated practice of correctly reading words that were once erred to decrease the likelihood of repeating the miscue (Wordsdell et al., 2005).

Opportunities to Respond/Repeated Practice

It has been well established that frequent active student responding contributes to high academic achievement (Greenwood, Delquadri, & Hall, 1984). Therefore, it is critical that educators structure their reading lessons so that frequent student responding and repeated practice of performing the same reading skill and, in many instances, performing the same skill on the same content, occurs. When educators provide plenty of opportunities for students to read and engage in repeated practice of reading skills, students are more likely to acquire, maintain, and generalize skills (McCormick, 2003). Moreover, students' rate of responding is increased when frequent opportunities to emit responses are provided (Skinner, Fletcher, & Henington, 1996). Incorporating judicious review of skills and content that has previously been taught is one way to prompt students to repeatedly practice skills so they are maintained over time (Carnine et al., 2004). When educators create opportunities to repeatedly practice skills, they must ensure that students are repeatedly practicing emitting correct reading responses, as all too often emitting the inaccurate reading of words becomes habit. Therefore, students' performance on practice exercises needs careful monitoring, initially, at the very least.

Shaping/Reinforcement

Reinforcing appropriate behaviors strengthens that behavior (Skinner, Pappas, & Davis, 2005). This is certainly the case for reading behaviors. When children are beginning to learn to read and apply strategies to read words accurately and comprehend text, they may need to be provided with reinforcers in successive approximations to emitting correct responses (Carnine et al., 2004). Providing reinforcers in successive approximations shapes students' reading behaviors toward making accurate responses. It lets students know the aspects of the task they are completing correctly. For instance, students may make some letter–sound correspondences of a word such as saying /sk/ correct for the word *skip*. They should be told which aspect of the response is correct so they are clear about this and will focus their attention on the aspects they are unsure about or have yet to master.

Specific Techniques

There are several techniques that have been designed and tested to address, specifically, critical component skills of reading. Critical component skills of reading are phonemic awareness, alphabetic principle, fluency, vocabulary, and comprehension. Some of those techniques are presented here; however, this is by no means an exhaustive representation of all possible techniques and methods for teaching reading skills. Although there is evidence in professional literature that supports the use of the following interventions for helping students improve particular reading skills, school psychologists in collaboration with educators need to assess the effectiveness of these interventions for helping individual students. These techniques can be adapted with regard to delivery format and intensity level for use across all tiers of instruction, which may mean these techniques may be taught during large and small group instruction and to individual students using teacher-directed instruction or peer or cross-age tutoring. Students can practice various reading skills using these techniques at home possibly with the assistance of their parents and older, capable siblings.

Phonemic Awareness

Some students demonstrate difficulty with decoding words because they are not alert to the individual sounds that make up spoken words, otherwise known as phonemic awareness. When students exhibit these types of prereading skill problems, phonemic awareness skills need to be targeted for instruction. Phonemic awareness

instruction activities may involve identifying beginning, middle, and ending sounds as well as blending, segmenting, and categorizing sounds. Mastery of these skills is a strong predictor of basic reading performance (Ball & Blachman, 1991; Bentin & Leshem, 1993; Bryne & Fielding-Barnsley, 1991).

Sound manipulation activities. There are a host of sound manipulation activities that encourage children to operate on the sound elements of spoken language. Two activities called sound boxes and sound sorts are described in detail in subsequent paragraphs. Children can be taught to operate on the sound structure of spoken language in a multitude of ways. They can segment sounds of a spoken word by clapping as they articulate each sound in a word or according to each syllable in a word. During recess, children can play hopscotch by hopping on a square as each sound in a word is articulated. Teachers can say a word and ask the children to chorally say individual sounds in the word. Teachers can teach sound blending by saying the word begins with /f/ and ends with /an/, and when they are put together, it makes *fan*. Deletion and substitution activities can also be incorporated such as, "If the *f* sound went walking away, what sound is left?" and "If the *c* came to take its place, what new word is made?" Variety of these sound manipulation activities or games helps children develop phonemic awareness skills (Wagner, Torgesen, Laughon, Simmons, & Raschotte, 1993; Yopp & Yopp, 2000).

Sound boxes. Phoneme segmentation skills can be scaffolded using sound boxes or what are commonly referred to as Elkonin boxes (Elkonin, 1973). Sound boxes are among variations of *say it/move it* activities (Blachman, Ball, Black, & Tangel, 2000). A rectangle is drawn on a dry-erase board, piece of paper, or cardboard. A series of connected boxes are created by drawing vertical lines inside the rectangle so that it is divided according to the number of sounds heard in a word. Tokens or other small objects that can easily slide into the boxes are placed below the divided sections of the rectangle or connected boxes. The instructor orally presents a word, and the children are instructed to slide the token in the respective divided sections of the rectangle as each sound in the word is slowly articulated. Initially, the instructor models the procedures for the student and then requires the student to complete the task by articulating the sounds of the word slowly and placing the tokens in the respective connected boxes. For instance, the word *pan* is presented orally to the student, and the student will place a token in the first box while he or she simultaneously articulates /p/, place a token in the middle box as he or she articulates /a/, and place another token in the last box as he or she says /n/. After tokens are placed in the boxes, the student may be instructed to repetitively move a finger just below the connected boxes and blend the sounds together until he or she is articulating every sound in the word quickly and effortlessly. Blank square-shaped tiles can be used rather than drawn connected boxes. This technique has been shown to be effective for helping children develop phonemic awareness skills (Ball & Blachman, 1991; Hohn & Ehri, 1983; Maslanka & Joseph, 2002).

Sound sorts. Categorizing sounds according to same beginning and ending as well as words that rhyme may help children become aware that many words may begin with the same sound, and so forth. Sound sort activities have been described and illustrated in Bear, Invernizzi, Templeton, and Johnston (1996). Often, a stack of picture cards are used. From the stack, two or three picture cards, each depicting, for instance, an object with a different beginning sound, are used to establish categories from which all other pictures are to be sorted. After the pictures are sorted in their respective categories, children are asked to say the words that represent the pictures they sorted and explain why they sorted them together. Instructors can model the tasks initially by sorting a few of the picture cards in their respective categories. Sound categorization has helped children develop phonemic awareness skills (Bradley & Bryant, 1983; Maslanka & Joseph, 2002).

Alphabetic Principle

Synthesis of research strongly supports the explicit teaching of phonemic awareness as a means of easing children's acquirement of the alphabetic principle (making letter–sound correspondences; Adams, 1990; National Reading Panel, 2000). Acquirement of letter–sound correspondences will help students to eventually read words with ease or automatically. When students have difficulty decoding words or making letter–sound associations, phonics needs to be directly taught. Teaching phonic skills directly means demonstrating how to make one-to-one correspondences with letters and sounds in words, and having students complete this task with guided practice and feedback. Children may practice decoding a word such as *mop* with repeated practice. After children have been able to read this word on several trials, students are presented with the word

sun as a discriminative stimulus, and the teacher points back and forth to the word *mop* and to the word *sun* and asks the students to decode them. Certain letter–sound correspondences may be written in boldface or in larger print to make particular features of the word salient for the students. These types of direct phonic lessons are described by Carnine et al. (2004) and are included as part of the lessons in such direct instruction programs as Direct Instruction System for Teaching and Remediation or Reading Mastery (Englemann & Bruner, 1988).

A way to help children acquire one-to-one letter–sound correspondences in a relatively short period of time is to teach children phonograms (sometimes called word families or onsets and rimes). *Cat*, *hat*, *bat*, and *sat* and *mice*, *slice*, *dice*, and *lice* are two different families of words that contain onsets and rimes. Phonograms may be taught before teaching words that typically appear on a sight word list. Words with onset and rime patterns are often words that contain regular spellings, whereas many words on a sight word list such as the Dolch list contain words with irregular spellings. Generative principles (reading words by analogy) can be easily applied to learning words with onset and rimes, making it easier and quicker to learn a larger number of words within a given instructional time period. There are 286 phonograms (Adams, 1990). Gaskins et al. (1988) and Goswami (1986) have found some scientific support for teaching onset and rimes to improve basic reading achievement for young children.

Word sorts. Phonograms can be sorted according to rhymes through word sort activities. Words are printed on index cards, and teachers can establish category words by sorting the remaining words. Words can be sorted according to common spelling and sound patterns (Zutell, 1998). Sorting phonograms is probably easier than sorting words according to other common features. Word sorts have been known to help children closely examine words and detect similar and different spelling and sound patterns among words (Joseph, 2000; 2002; Morris, Shaw, & Perney, 1990; Santa & Hoien, 1999).

Word boxes. Word boxes are similar to sound boxes except word boxes have magnetic letters and letter tiles rather than tokens. A word placed on an index card may be placed above drawn connected boxes with respective letters placed below them. Children are instructed to slide the letters into the boxes as they slowly articulate the sounds the letters represent. Eventually, children may sweep their finger across or below the boxes as they articulate the sounds more quickly. Initially, the instructor models this procedure for the children. The structure of the connected boxes is gradually faded by first removing solid lines dividing the boxes and replacing them with dotted lines. Students are asked to articulate sounds of the word while sliding letters in the semifaded connected boxes. The dotted lines are then removed leaving a large rectangle. Eventually, the rectangle is removed and children read the word without a supportive structure. Children can also be taught to write the letters in the connected boxes as they articulate the sounds to build reading and spelling skills (Joseph, 1998/1999). This procedure has been used within the comprehensive Reading Recovery program when children need assistance making letter–sound sequences while they are attempting to decode words (Clay, 1993).

Fluency

When students are able to read most words in their grade-level texts but do so slowly and with little expression, instruction aimed at increasing the oral reading rate should be targeted. In other words, the goal is to help children become fluent readers. Fluent readers are those who read words accurately, effortlessly, quickly, and with expression. Reading fluency has been related to reading comprehension performance (Sindelar, Monda, & O'Shea, 1990). Increasing fluency skills often involves repeated practice under timed conditions. Students can be taught to become fluent on all the critical component skills of reading. The following techniques and methods can be used to increase reading fluency in and out of connected text.

Traditional flashcard drill and practice. Flashcard drill techniques are used to teach children to read words accurately and quickly, especially if drills are timed. The instructor models reading the word printed on a flashcard and asks the student to read the word followed by feedback. There may be 10 or so flashcards with words printed on them. Once each word has been modeled, teachers may present each flashcard for a very short period and ask the student to read it. Repeated trials of this procedure can occur until students achieve mastery. Flashcard drill procedures have been found to be effective for helping children gain word recognition and comprehension skills (Tan & Nicholson, 1997). An even more compelling finding is that traditional flashcard drill procedures are more efficient for helping children read and spell words that

are unknown to them in contrast to other flashcard techniques (Cates et al., 2003; Joseph & Nist, 2006; Schmidgall & Joseph, 2007).

Simultaneous verbal prompting. Simultaneous verbal prompting may be used within a traditional drill flashcard technique to help children develop oral reading fluency skills. The teacher presents a word and its definition, says the word, and has the student immediately repeat the word followed by corrective feedback. The teacher and the student almost sound as if they are reading the word at the same time but the teacher is reading the word at a slightly faster pace than the student. This method proved to be efficient for helping students read words (Johnson, Schuster, & Bell, 1996).

Incremental rehearsal. Often, students need practice reading words that are not presented in connected text. A procedure called incremental rehearsal is one that incorporates building on background knowledge and prior success and ample opportunities to repeatedly practice skills. Incremental rehearsal involves teaching 10% unknown or new content with 90% known or mastered content (Tucker, 1988). Initially, a set of 10 unknown words is identified. The words are printed on note cards. Nine known words are also printed on note cards. The first unknown word in the set is interspersed in an incremental fashion nine times among the nine known words. The instructor begins by reading the first unknown word to the students and asks the student to read the word. Then, the first known word is presented again, and the student is asked to read it. Error correction is provided if the word is read incorrectly. This is followed by presenting the first known and the second known word before the first unknown word is presented again. The process continues until the first unknown word is presented incrementally nine times with nine known words. When the first unknown word is mastered, it becomes the first known word. The ninth known word is then removed and replaced with the second unknown word from the set of unknown words. Similar to this procedure is a technique called *folding in*, where unknown words are folded into known words (Shapiro, 2004). The incremental rehearsal technique has been supported in several investigations for teaching reading words as a whole and teaching vocabulary (Burns, Dean, & Foley, 2004; MacQuarrie, Tucker, Burns, & Hartman, 2002). This procedure not only helped children acquire and become fluent at reading words but also helped children maintain reading words correctly over time. This technique can also be used to practice letter naming, saying sounds, and making letter–sound correspondences.

Repeated readings. Having students engage in repeated readings of text helps them improve their skills in reading accurately, quickly, and with expression (i.e., fluency; Samuels, 1979). Across grade levels, ages, and reading levels of pupils, repeated readings have consistently been found to improve fluency (e.g., Carver, 1997; Freeland, Skinner, Jackson, McDaniel, & Smith, 2000; Kuhn & Stahl, 2003; Stoddard, Valcante, Sindelar, O'Shea, & Algozzine, 1993; Weinstein & Cooke, 1992). When repeated readings are coupled with error correction procedures, students particularly gain fluency skills (Nelson et al., 2004) and comprehension skills (Staubitz, Cartledge, Yurick, & Lo, 2004; Therrien, 2004). Teachers are advised to have students read orally during repeated reading lessons so that errors are recorded and corrected. It is also recommended that readings be timed so that words correct per minute can be determined. Short passages may contain 50–300 words with 85% of the words read correctly in the initial reading. While it is generally best practice to have students read passages that are written at students' instructional levels, educators can have students read passages just above a student's instructional level during repeated readings of passages. The goal is to have the students repeat the reading of passages as many times as needed until the passages can be read at 100 words correct per minute.

Phrase drill. During repeated readings, an effective error-correction procedure called phrase drill may be used to promote generalization of reading words correctly in connected text (Daly et al., 2005). While students are engaged in oral reading of a passage, the instructor is highlighting or underlining all of the words that are read inaccurately. Feedback is given on oral reading miscues by modeling the correct reading of a word and having the students reread the phrase that contains the erred word three times. Students repeat the reading of the entire passage after practicing reading all phrases that contained the erred words. This technique has been found to be particularly effective for reducing errors made during oral repeated reading instruction (Begeny, Daly, & Valleley, 2006).

Listening while reading. Also referred to as listening passage preview, this procedure is typically

used when students have difficulty reading some of the words in a passage or read them at very slow rates. Teachers can model reading a passage by reading it aloud to the students and requiring them to follow along with their fingers. Teachers observe students frequently to make sure they are following. After students follow along while the instructor reads, they are asked to reread the passage. This modeling procedure has been found to be effective for improving oral reading accuracy and fluency (Daly & Martens, 1994; Skinner et al., 1993) as well as comprehension (Hale et al., 2005).

Vocabulary and Comprehension

When students exhibit difficulty understanding and deriving meaning from text, explicit instruction on comprehending needs to be provided. Difficulties understanding text can be derived from not knowing meanings of words or concepts, not capturing factual information, not inferring about content, and not forming relationships among content presented in text or in previous texts (also referred to as intertextuality). Vocabulary instruction should involve teaching a few words at a time and systematically introducing new concepts while judiciously reviewing those that have been mastered (Carnine et al., 2004). This can be accomplished using the incremental rehearsal technique (Tucker, 1988), which was described previously.

Semantic webs. Semantic webs can be used to describe characteristics and definitions of a concept or word (Dufflemeyer & Banwart, 1993). The key concept or word can be placed in the center of the web and characteristics can be placed at various places around the targeted word. Teachers can guide the students to completing their web by asking questions such as, "What is it? What is it like? What are some examples? Where do you see it?" These webs can be used as a preteaching tool to introduce concepts before students read text or after to assess their understanding of key concepts in the text. Categorization tasks can involve sorting words according to their shared meanings (Zutell, 1998).

Story maps. Story maps can be a way to facilitate comprehension of story grammar elements from text. Story grammar elements include characters, setting, theme/main idea, major events, problems/conflict, and resolutions. Story maps can be used during or after storybook reading as a way to organize elements contained in narrative text. Initially, teachers may need to show students how to use graphic organizers such as a story map and provide students with guided practice as they attempt to use them. The use of story maps yielded positive performance on measures of reading comprehension (e.g., Awe-Hwa, Vaughn, Wanzek, & Wei, 2004; Boulineau, Fore, Hagan-Burke, & Burke, 2004).

Response cards. Response cards can be used to teach and monitor reading comprehension. They may come in the form of dry-erase boards, small chalkboards, or small poster boards that may either be blank for students to write their answers or are preprinted cards containing multiple choice responses (Heward et al., 1996). Response cards are a way to increase the opportunities that all children in a classroom setting have to engage in making active responses. After a story or a passage is read, the teacher asks comprehension questions. After each question is asked, all students in the class can actively participate by writing a response on their cards or selecting a response from multiple choice responses by moving a clothespin or clip next to their choice or by circling their choice. Teachers check all students' responses and provide feedback to the students by presenting a card with the correct response on it. Students can readily check their responses against their teachers' and make corrections on their board if their response does not match their teachers.

Questioning and paraphrasing text. Questioning text involves generating questions about the contents of the text before, during, and after reading text. Students have been found to understand text better when they form and answer their own factual as well as inferential questions (e.g., predicting upcoming events; Beck, McKeown, Sandora, Kucan, & Worthy, 1996). Paraphrasing consists of restating in his or her own words what was recently read, and retelling refers to using the exact words contained in the text that was just read. Both have been found to be effective for helping students comprehend text particularly if students are provided with opportunities to engage in frequent retellings with guidance (Morrow, 1985; Simmons, Fuchs, Fuchs, Mathes, & Hodges, 1995).

Increasing rate of comprehending text. Several students may eventually understand what they have read including being able to answer comprehension questions accurately; however, they may do so at a very slow rate making reading laborious and uninteresting over time. The rate at which students understand text material needs to be assessed as well as boosted. One way comprehension rate is assessed is by multiplying the percent of questions a student answered

correctly multiplied by 60 (i.e., 60 seconds) and divided by the time (in seconds) it took the student to orally or silently read a passage (Freeland et al., 2000). Studies have supported its use as a valid measure of reading comprehension (Neddenriep, Hale, Skinner, Hawkins, & Winn, 2007). Timed repeated readings may be coupled with timed repeated drills on answering comprehension questions to help students monitor the rate at which they are comprehending text per minute of reading text.

Reading Programs

Although not exhaustive of all possible effective reading programs, the programs described here are among those that incorporate effective direct instruction components for teaching a multitude of basic reading skills. These programs have been found to be effective for teaching large and small groups of students as well as individual students across various grades and diverse needs. These programs may, in particular, be used during Tier 1 and 2 services. However, reading programs may be implemented across all tiers of service using teacher-directed instruction or peer or cross-age tutoring.

Reading Mastery

Direct instruction Reading Mastery was originally called the Direct Instruction System for Teaching and Remediation program (Englemann & Bruner, 1988). A scope and sequence of prereading and reading skills are taught using fast-paced, systematic scripted lessons that incorporate demonstration, choral responding, corrective feedback, scaffolding, shaping, and opportunities to practice until students master skills. Teaching sounds in isolation, blending sounds, and making letter–sound correspondences are among the skills that are taught to children using this program. This program has been demonstrated to be effective across grade levels and diverse populations (Adams & Englemann, 1996; Meyer, 1984).

Corrective Reading Decoding

Another program developed by Englemann and associates (Englemann, Hanner, & Johnson, 1989; Englemann, Johnson, et al., 1999; Englemann, Meyer, Johnson, & Carnine, 1999), Corrective Reading Decoding, contains approximately 100 scripted lessons and is designed for grades 4–12. This program can be implemented with an individual, small group, or large group of students. There is a curriculum-based program placement test called the Corrective Reading Decoding Placement Test, which aids in determining whether students should be taught decoding skills beginning with Corrective Reading Decoding strategies A, B1, B2, or C. Scripted lessons consist of teaching word attack skills in isolation and in context with an emphasis on basic sound–symbol associations of individual letters, digraphs, and blends as well as teaching correct identification of similarly spelled words. The lessons in Corrective Reading Decoding C are for the student who has acquired very basic word attack skills. Decoding C is aimed at teaching multisyllabic words, increasing fluency, and helping children read expository text or content-area textbooks. For instance, a lesson may begin with a review of word identification skills and preteaching challenging vocabulary words. Next, the student reads a passage. Students are required to respond to the questions without using the book and without the assistance of the instructor.

When errors are made, the instructor prompts the student to correct those errors and asks the student comprehension questions that are located throughout the passage in the instructor's manual. When students make correct responses to the questions, the instructor provides verbal praise, and students are directed to locate the answer in the paragraph when they respond inaccurately. The goal is for the student to eventually read a passage making zero errors.

Educators and peer tutors who are unfamiliar with direct instruction programs and methods of teaching may need some training in following a scripted lesson, prompting, making error corrections, reinforcing accurate responses, and pacing. It should be emphasized that training is minimal compared to other methods owing to the already prepared structured lessons. These direct instruction programs have been found to be effective for helping diverse students in a variety of settings and especially in inner-city settings where many students are raised in poverty and in less than optimal home environments and where rich literacy experiences are very limited or do not exist (Shippen, Houchins, Steventon, & Sartor, 2005). Despite compelling evidence for helping children who were severely delayed readers achieve higher reading performance over and above that of children who received other types of reading programs (Adams & Englemann, 1996), direct instruction programs, in general, have been scrutinized for their rote learning format and their lack of emphasis on facilitating higher order thinking skills. School psychologists can help educators overcome these negative perceptions about direct instruction by pointing out the advantages such as reduction in the time it takes to gather materials and prepare lessons; the time it takes to

task analyze skills to develop a scope and sequence of which skills should be taught first, second, and so forth; the acquirement of various ways to prompt responses from students; and the relatively short time period (fast paced) for which teachers have to spend time teaching and judiciously reviewing basic skills. Corrective Reading helped middle and high school students improve their reading skills (Gregory, McLaughlin, Weber, & Stookey, 2005; Shippen et al., 2005). Corrective Reading has also been implemented very effectively for high school students within a peer-tutoring context (Harris, Marchand-Martella, & Martella, 2000) and has been used in conjunction with repeated reading exercises to boost fluency skills (e.g., Strong, Wehby, Falk, & Lane, 2004).

Reading Excellence: Word Attack and Rate Development Strategies

Reading Excellence: Word Attack and Rate Development Strategies (Archer, Gleason, & Vachon, 2000) contain 20 lessons that focus on teaching basic reading skills. The first 12 lessons involve helping students learn to blend words, recognize vowel sounds in words, and identify word parts at the beginning and ending of words. In the remaining eight lessons, students are provided with opportunities to practice the decoding strategies learned in prior lessons. This program is comparable to Corrective Reading Decoding with regard to its effect on helping students improve their basic reading skills (Shippen et al., 2005).

Great Leaps Reading Program

Created by Campbell (1995), the Great Leaps reading program involves lessons that last between 5 and 6 minutes. Mercer, Campbell, Miller, Mercer, and Lane (2000) found this program to be particularly successful for helping middle school students with learning disabilities improve their oral reading fluency performance. The program includes instruction on phonics, sight phrases, and oral readings of passages. The phonics instruction lasts about 1–2 minutes and consists of teaching letter–sound correspondences, sounds in isolation, consonant blends, consonant /y/, /h/, combinations, CV-VC, CCV, CCV-VCC, CCCV, CVC, C/CC, vowel r, CCVC, CVCC, VCC, and final /e/ consonant–vowel letter combinations. The teacher begins by presenting the page containing words with target sounds and modeling them for the student. The student is then given 1 minute to read the words on the page. If more than two errors are made, then the student reads the entire page again during the next session. However, the student is able to leap onto the next page if he or she is able to read the words on the page without an error or fewer than two errors.

Instruction on sight phrases involves asking the student to read as many phrases as possible in 1 minute. The instructor provides corrective feedback when errors are made. If the student does not read the entire page of phrases with less than two errors, then he or she is required to read it again in the next session. The student is able to leap to the next page containing more challenging phrases if he or she makes no errors or fewer than two errors. The same procedure is applied during instruction in oral reading of stories except that the student is asked to read as much of a story as possible with fewer than two errors and at a rate no faster than a comfortable speaking rate. If the student is able to read the passage in a minute with fewer than two errors, then the student is able to leap to a more difficult passage in the next instructional session.

The Great Leaps reading program consists of progress-monitoring assessments. Teachers chart student progress by recording the number of sounds articulated correctly and the number of words read correctly as well as the number of errors made during timed oral readings. The charts are shared with the student so accurate responses are realized and areas of improvement are addressed by setting goals. The progress-monitoring feature appears particularly helpful to middle school students with serious emotional disturbances (Scott & Shearer-Lingo, 2002).

Another version of Great Leaps is designed for kindergarten through second grade (Mercer & Campbell, 1998). This version includes lessons on teaching phonological awareness skills (i.e., manipulating sounds in words) such as teaching skills in rhyming, identifying words with the same beginning or final sound, blending sounds, syllables, and phonemes; segmenting words, syllables, and phonemes; and phoneme deletion, reversal, and substitution. Research indicates that even middle school students who have not acquired phonemic awareness and basic reading skills make gains in acquiring and retaining phonological awareness skills (Bhat, Griffin, & Sindelar, 2003). The results of this study are consistent with other studies that support the training of phonological awareness skills for older delayed readers (e.g., Pogorzelski & Wheldall, 2002).

PALS

Fuchs et al. (1995) developed PALS as a way to extend class-wide peer tutoring by incorporating assisted

reading strategies. This program was originally designed for kindergarten and elementary grade students. The kindergarten version is referred to as KPALS and involves teaching emergent reading skills such as phonemic awareness, pronunciation, and alphabetic knowledge. The first-grade version consists of teaching phonemic segmentation, partner reading of connected text, and story retell. Partner reading, paragraph shrinking, and prediction relay are three activities that make up PALS. Briefly, partner reading involves a higher performing student reading to a lower performing student. The higher performing student reads connected text aloud for 5 minutes and then a lower performing student rereads the text for 5 minutes. Prompting and error correction are provided by the higher performing student. The lower performing student is given 2 minutes to retell the sequence of events in the text. Paragraph shrinking involves fostering comprehension skills. As the lower performing student continues to read one paragraph at a time in the text, the higher performing student guides the lower performing student's reading by asking the lower performing student to identify the main idea and summarize the paragraph in 10 or fewer words. If the main idea is not extracted or a less than adequate summary is provided, then the higher performing student may encourage the lower performing student to reread the text again or skim the paragraph to produce an improved response. If the paragraph is summarized using more than 10 words, the tutor may ask the lower performing student to shrink it. Prediction relay consists of having the lower performing student make a prediction about what will be learned on the next half page of the text, read the next half page of the text aloud, and then confirm the prediction and summarize the main idea of this section of the text. Prompting and error correction are provided by the higher performing student throughout this process. The higher and lower performing students switch roles. A reinforcement system is incorporated in PALS. Interestingly, Fuchs, Fuchs, and Kazdan (1999) found tangible reinforcers particularly helped high school students maintain their interest in peer-assisted activities. PALS may be used along with other reading programs or methods.

PALS has been demonstrated to be effective for students across grade levels (Fuchs, Fuchs, & Burish, 2000; Fuchs et al., 1999) and has been used in conjunction with other reading programs. For instance, Calhoon (2005) examined the effects of PALS coupled with the Linguistics Skills Training (LST) program (Calhoon, 2003) for middle school students and found that improvements were made on word recognition, pseudoword reading, and passage comprehension in contrast to a group of students who received traditional whole class format instruction. LST is a peer-mediated program designed to teach phonological skills (speech–sound identification, vowel and semivowel patterns, phoneme counting, phonetic transcription, sequencing syllables, morphemes, and orthographic conventions) through scripted lessons containing teacher-directed instruction followed by peer tutoring that is closely monitored by the teacher. Similar to Fuchs et al.'s (1999) findings, Calhoon (2005) did not find any significant differences between the groups on reading fluency.

Read Naturally

Read Naturally (Inholt, 1991) is a program aimed at developing oral reading fluency for students reading at grade levels 1–8. This program is composed of a sequence of activities that involve repeated reading of instructional-level expository passages. Modeling, feedback, timed readings, and progress monitoring are important instructional components that are incorporated in this program. Criteria for mastering a passage are established. A passage is considered mastered when the student achieves his or her individualized fluency goal rate, makes no more than three errors, and reads with appropriate expression. Denton, Fletcher, Anthony, and Francis (2006) found that Read Naturally coupled with a phonics program improved fluency skills of children who were instructed in small groups over an intensive 16-week instructional period.

SUMMARY

Implementing interventions for students who have reading problems should occur within a scientific process of targeting students' needs and selecting and applying evidence-supported instruction that matches their needs and evaluating whether or not students improved their performance at sufficient rates as a function of the instruction. The amount and types of interventions that may be needed can be determined and evaluated within a three-tiered RTI system so that as many children as possible who are in need of supplemental reading instruction receive it. There are critical component reading skills that a student may need to develop or further develop before he or she is considered a proficient reader. These component skills include phonemic awareness, alphabetic principle, fluency, and comprehension. Some students need to

acquire a particular skill while others may have acquired the skill but need more practice to become proficient at performing that skill. There are general and specific scientifically supported techniques and programs that are designed to help students acquire and become proficient at performing critical reading skills. School psychologists can be instrumental given their training at assisting students in accomplishing reading achievement goals through data-based decision RTI activities.

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One of the most if not the most comprehensive book on understanding and applying explicit (direct) teaching principles for teaching reading skills. Describes a direct assessment process and tools for identifying specific skill areas that are in need of direct instruction. A task analysis of reading skills is presented that is helpful for all educators, especially those who may have received very little training in teaching reading. This book is one that educators will find themselves referencing and using on a frequent basis.

Daly, E. J., III, Chafouleas, S., & Skinner, C. H. (2005). *Interventions for reading problems: Designing and evaluating effective strategies*. New York: Guilford press.

An excellent resource for putting science into practice with regards to identifying reading skill needs, targeting appropriate scientifically supported reading interventions, and evaluating the effectiveness of those interventions. Includes selecting and monitoring interventions that are designed to address critical reading skill components of phonemic awareness, alphabetic principle, fluency, and comprehension. Provides samples of intervention protocols and assessment probes to measure reading progress. Addresses how consultants can overcome some of the barriers to working collaboratively to use best practices in assessing and implementing interventions for children who have reading problems.

Haager, D., Klingner, J., & Vaughn, S. (Eds.). (2007). *Evidence-based reading practices for response to intervention*. Baltimore: Brookes.

Describes primary, secondary, and tertiary intervention services in depth. Examples of research studies that explored the effectiveness of primary, secondary, and tertiary interventions are provided. Also included is a chapter on the role of assessment in the three-tier process. Working with culturally and linguistically diverse students within a three-tier approach is also described.

Joseph, L. M. (2006). *Understanding, assessing, and intervening on reading problems: A guide for school psychologists and other educational consultants*. Bethesda, MD: National Association of School Psychologists.

Written particularly for school psychologists. Provides a discussion about how reading develops including critical component skills of phonemic awareness, alphabetic understanding, fluency, and comprehension. Describes environmental factors including a discussion about home–school collaboration efforts that may boost reading achievement for children as well as assessments for targeting specific reading skill problems. Describes general, word

level, and comprehension interventions and provides a discussion on how to use functional analysis to evaluate the effectiveness of reading interventions.

McCormick, S. (2003). *Instructing students who have literacy problems* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Covers just about every reading skill and is written for those who work with students who struggle acquiring literacy. Contains enormous amounts of detail including many illustrations on instructional methods, techniques, and programs designed to help children who are struggling to acquire literacy skills. Instruction for diverse types of readers is presented. Methods and approaches for teaching the most severely delayed reader including nonreaders are described in practical terms. Several case study examples are provided.

WEB RESOURCES

Intervention Central: www.interventioncentral.org

Provides various intervention strategies and curriculum-based assessments as well as readability formulas for determining difficulty level of reading passages.

National Reading Panel: http://www.nichd.nih.gov/research/supported/nrp.cfm

Provides a report that synthesizes research on reading instruction of the critical reading skill components.

Reading Rockets: http://www.readingrockets.org/teaching

Presents research-based practical information for parents and educators on teaching critical component reading skills.