A Meaning-Based Plan for Addressing RTI for Struggling Readers

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ABSTRACT

Reading is creating meaning with print. It makes sense that interventions for struggling readers be similarly meaning-based and take place, to the greatest extent possible, in a general education setting. This article describes a meaning-based Response to Intervention plan that is economical, pragmatic, research-based, and effective. Based on a neurocognitive modeling of reading, this plan provides research-based guidance to schools working to implement Tier I, Tier II, and Tier II interventions for RTI that will enable all students to achieve their full literacy potential.

OVERVIEW

Schools continue to wrestle with how to best meet the requirements of Response to Intervention (RTI) as outlined in the Individuals with Disabilities in Education Act (2004). This article describes a way of addressing RTI for struggling reader that is pragmatic, economical, effective, and supported by a substantial body of research from a variety of perspectives and fields. This is different from most of the RTI plans for reading I have reviewed. Thus, I hope to provide a more complete understanding of RTI as it relates to reading and demonstrate a plan for implementation that is in accordance with both a wide body of research and the original IDEA description. The first part of this article outlines each of the three tiers and includes a variety of research-based strategies and recommendations, each of which are set within a meaning-based context. In the discussion that follows the theoretical assumptions upon which this meaning-based approach is designed are identified. Also, differentiation between programs, methods, and intervention plans are described and their potential for helping students achieve their full literacy potential is examined.

Origins of This Meaning-Based Approach to Reading Interventions

The meaning-based approach for struggling readers described in this article has its basis in the non-profit literacy tutoring center that I developed and ran. Here, I worked with struggling readers who were failing in the public schools. Analyses of these students' Individual Educational Programs (IEPs) showed a common theme: Regardless of their individual needs, struggling readers were given a one-size-fits-all, skills-based program focusing primarily on letter-sound relationships. Reviewing each students' IEP history showed that these programs did not work. Yet, each successive year, similar goals and services were identified with the same results. In other words, students were continually given more of what was not working.

At my literacy centers, we developed a meaning-based approach that (a) was set within the context of a full spectrum of literacy research; (b) developed students' phonological, semantic, and syntactic cueing systems; (c) focused on word identification, fluency, and comprehension; and (d) got students reading good books at their independent level or below to the greatest extent possible. Volunteer tutors were trained to implement weekly lessons. As a result, gains were made related to word identification, fluency, and comprehension. Parents and tutors also reported gains in self-esteem and self-efficacy.

This meaning-based approach was then taking to a special education resource room in an elementary school setting. Here, I worked with students with intellectual disabilities as well as students with moderate to severe reading disabilities. Paraprofessionals were trained to implement daily lessons. At the end of the year, gains were made in word identification and fluency scores; there was an increase in meaningful miscues and self-correction (metacognition) during reading; and there were improvements in students' writing mechanics, complexity of sentences, and willingness to write.

Finally, this meaning-based approach has been field tested and is currently in use in two Wisconsin elementary schools as part of their RTI program for reading. The teacher data here

supports its effectiveness, its ease of implementation, and students' positive reactions to a meaning-based approach.

Understanding Interventions and RTI

A distinction needs to be made first between an intervention and a curriculum. A curriculum is a systematic plan for instruction that delineates what knowledge and skills are taught, in what general order, and in what context. A intervention is a focused instructional program or plan that supplements an existing reading curriculum for a short period of time. An effective reading intervention will enhance students' current reading levels such that it is no longer needed. What is described in this article is a reading intervention, not a curriculum.

RTI is a specific type of intervention that is designed to provide immediate instructional help for students who struggle to read, write, or do math without them having to be formally identified for special education programs. Here students are identified for instructional help based on how they respond to classroom instruction and three levels (tiers) of intervention. Each tier is described below as it relates to struggling readers.

TIER 1: HIGH-QUALITY CLASSROOM INSTRUCTION, SCREENING, AND GROUP INTERVENTIONS

Tier 1 interventions take place within the general education classroom by the general education teacher. Some interpret this tier to be high-quality, research-based classroom instruction that all students receive (my interpretation). Others interpret this to be a specific intervention that occurs within the classroom setting. Either way, Tier 1 includes three elements: high-quality classroom instruction, screening, and group interventions.

High-Quality Classroom Instruction

High-quality instruction refers to (a) the method or approach, (b) the pedagogical strategies used, and (c) the specifics of lesson delivery. High-quality reading instruction cannot occur in the absence of high-quality reading teachers (Allington, 2011, Bishop, et al, 2010; Brownell, et al., 2009; IRA, 2010: Wharton-McDonald, 2011; Wixson, Lipson, & Valencia, 2014). Thus, successful RTI programs for reading are dependent on having teachers who are experts in reading instruction (IRA, 2010; Wixson, Lipson, & Valencia, 2014). Expert reading teachers are those with a broad understanding of literacy learning, literacy learning theories, literacy research, literacy assessment and diagnosis, and literacy pedagogy.

Screening

Screening in Tier 1 is used to see if students are responding appropriately to the instruction found within the general education curriculum. Screening consists of (a) establishing a baseline, (b) setting goals or benchmarks, and (c) monitoring progress (Averill, Baker, & Rinaldi, 2014).

Establishing a baseline. The baseline is a measure of students' current level of reading performance. To be pragmatic, any type of measure used here needs to be administered in large group.   A maze is one such measure that can be used to establish a quantifiable baseline (see Figure 1). It has also been shown to be a valid and reliable indicator of students' ability to create meaning with print (Graney, Martinez, Missall, & Arick, 2010). A maze can be used to determine students' independent, instructional, and frustration reading levels.
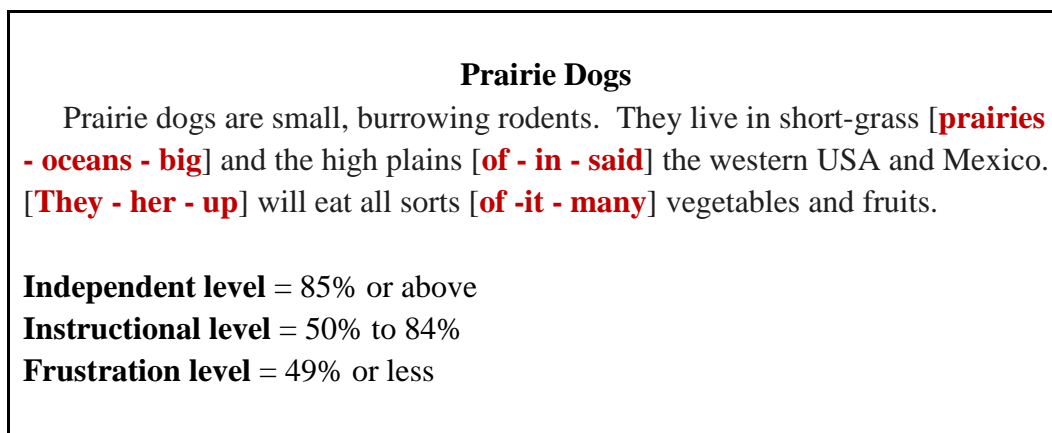

Prairie Dogs

Prairie dogs are small, burrowing rodents. They live in short-grass [**prairies - oceans - big**] and the high plains [**of - in - said**] the western USA and Mexico. [**They - her - up**] will eat all sorts [**of -it - many**] vegetables and fruits.

Independent level = 85% or above
Instructional level = 50% to 84%
Frustration level = 49% or less

Figure 1. Example of a maze.

Goals.

The RTI goals (or benchmarks) establish where you think students should be at various times during the year (Wixson, & Valencia, 2011).   Benchmark goals should be set at three or points during the year. Identifying benchmark goals and how they will be measured must be carefully considered as these decisions greatly impact and define the type of interventions students receive. A maze can also be a simple and effective measurement tool to use here.

Monitoring progress.

If students are not making adequate progress toward established benchmark goals, a Tier 1 intervention is used (see below). A progress monitoring system is implemented here to check students' progress at shorter intervals. Simple progress monitoring strategies are described below related to fluency, word identification, and comprehension.

Group Interventions: In-class supplemental instruction

Reading interventions at all tiers should always be coordinated with classroom instruction (Allington, 2011; Averill, Baker, & Rinaldi, 2014; IRA, 2010; Scanlon, 2011; Wixson, Lipson, & Valencia, 2014). They should reflect the types of research-based instruction used with the general education reading curriculum. In this way, students' learning experiences do not become splintered or fragmented. Instead, the intervention builds upon and reinforces good classroom

reading instruction. RTI is not meant to replace good classroom instruction; it is meant to enhance it.

Tier 1 interventions involve supplemental instruction that occurs within the general education classroom. And because a classroom teacher is still responsible for teaching the general education curriculum as well as the intervention, Tier 1 must be simple, pragmatic, and effective. Toward this end, variations of the five elements below are recommended:

1. Daily sustained silent reading of books at students' independent level and below. The goal here is reading volume. Reading volume has been shown to enhance comprehension, fluency, vocabulary, and word identification (Cunningham & Allington, 2010; Cunningham & Stanovich 2001; Krashen, 2004).

2. Daily writing. Writing is one of the best strategies for developing the syntactic cueing system as well as letter-sound relationships (Parodi, 2013). Writing activities here need not be long, but they should be authentic. That is, students should be writing and sharing their ideas.

3. Guided reading lessons. Guided reading lessons are used to teach specific reading skills to small groups in authentic reading contexts (Lipson & Wixson, 2009). These skills are usually related to word identification and comprehension (see Figure 2).

1. Context clues (semantics)
2. Word order and grammar (syntax)
3. Word parts or analyzing words
4. Morphemic analysis (prefixxes, suffixes, and root words)
5. Phonics

Figure 2. Five ways to identify words during reading.

4. Word identification. Word identification includes instruction related to letter sounds or letter patterns (Cunningham & Cunningham, 2002; Erickson & Kopenhaver, 1995). This would include analytic, synthetic, and large unit phonics instruction. It also includes cloze and maze activities to develop the semantic cueing system (Paulson & Freeman, 2003) (see below).

5. Fluency work. Fluency work usually involves some form of repeated reading (Kuhn & Stahl, 2013) (see below).

TIER 2: TARGETED INTERVENTIONS

Students not meeting Tier 1 benchmark goals are identified for a Tier 2 intervention. Tier 2 interventions (most often done in small group) usually occur outside the general education classroom. These groups can be cross-graded. Instruction here should build upon the Tier 1 intervention to the greatest extent possible.

Data-Based Decision Making

RTI calls for data-based decision making to be used throughout (Averill, Baker, & Rinaldi, 2014; IRA, 2010; Wixson, Lipson, & Valencia, 2014). This means that data need to be collected at various points during the intervention (see progress monitoring), and used to inform instruction. It also means that the specific reading intervention for each student should be based on solid, diagnostic data (Foorman & Connor, 2011; Wixson, & Valencia, 2011). Thus, some type of measure must be used diagnose the cause of the reading difficulty before a student moves into a Tier 2 intervention.

Standardized tests, while useful for comparing students to a general population, are not effective for diagnosing reading problems (Gormley & McDermott, 2011). An effective diagnostic measure for reading provides two types of data: (a) a general sense of students' approximate reading grade level (or Lexile level) and (b) descriptions of students' strengths and weaknesses in each of the three reading deficit areas: word identification, fluency, and comprehension (Spear-Swerling, 2013; Valencia & Buly, 2004). An Informal Reading Inventory (IFI) is one such diagnostic measure (see Figure 3) (Johnson, 2016). In the hands of a knowledgeable reading teacher, an IFI provides a rich source of data (Weaver, 2009).

• Qualitative Reading Inventory, 5th edition, (Leslie and Caldwell)
• Reading Inventory for the Classrooms, 5th edition, (Flynt and Cooter)
• Classroom Reading Inventory, 12th edition, (Silvaroli and Wheelock)
• Basic Reading Inventory, 10th edition, (Johns)
• Analytical Reading Inventory, 9th edition, (Woods and Moe)
• Ekwall/Shanker Reading Inventory, 6th edition, (Shanker and Ekwall)
• Informal Reading Inventory, 8th edition, (Roe and Burns)

Figure 3. Common diagnostic reading assessments

Targeted Instruction

Tier 2 instruction should be targeted. Targeted instruction does not mean simply implementing a program, curriculum, or strategy. There is no single evidence-based program, research-based curriculum, or scientifically-based teaching strategy that works best for all students (Allington, 2012; Wharton-McDonald, 2011). There are, however, a variety of strategies that research has shown to be effective with certain students, for certain tasks or skills, and in certain situations. However, the effectiveness or ineffectiveness of any strategy is dependent on how, when, where, for whom, and for what purpose it is used or applied. Therefore, teachers implementing any type of reading intervention must have a variety of pedagogical tools (strategies) in their teaching toolbox. They must also be empowered to make the decisions necessary to best meet the needs of their students (Allington, 2002; Lyons, et. al, 2013; Marks & Louis, 1997).

Targeted instruction for reading means that it specifically addresses each student's deficit area or areas. The meaning-based intervention described below does this. Brief descriptions of the types of strategies used are included. None of these strategies singularly are particularly new. However, the difference between this RTI plan and other programs or methods is in (a) the tempo and the diversity of intervention sessions, (b) the meaning-based emphasis, (c) the focus on all three cueing systems, and (d) the flexibility to adopt and adapt to meet individual needs.

A Meaning-Based Intervention

To have an impact, Tier 2 intervention groups need to meet a minimum of three days a week. Shorter bits of focused instruction are much more effective than longer bits of instruction in which students are not actively engaged. Depending on the age and level of the student, the duration for these sessions should be anywhere from 15 minutes a day for younger students to no more than 45 minutes a day for older students.

Below the types of strategies used with this meaning-based intervention are described. Variations and combinations of these should be included depending on students' needs. Sessions should be briskly-paced consisting four to eight of these strategies. Each strategy should be three to no more than eight minutes in duration.

1. Writing. Some form of writing activity should be included in every intervention session for students whose deficit area is word identification. The reading-writing connection has been firmly established (Duke, Pearson, Strachan, & Billman,2011; Goodman, Fries, & Strauss, 2016; Goodman & Goodman, 2009; Kuder & Hasit, 2002; Lipson & Wixon, 2009; Parodi, 2013; Pressley, Wharton-McDonald, & Mistretta, 1998; Silliman, & Wilkinson, 1994; Strickland, 2002; Weaver, 2009). Writing helps strengthen letter sound relationships and is one of the most effective strategies to use in develop the syntactic cueing system. Below are descriptions of some of the writing activities used with this meaning-based intervention:

• *Language experience activities (LEA).* Here students dictate a minimum of five sentences to create a paragraph/story. The teacher writes the paragraph/story on a screen, board, poster, or paper. Students then re-read until fluency is achieved. Next, the paragraph/story is used for an analytic phonics mini-lesson. Here students are asked to identify words that have certain sounds, blends, or letter patterns in the middle, beginning, or end.

• *Sentence mix-up.* Here students are given a sentence in which the words are out of order. Students create meaning by putting the words in correct order. With younger children, 3x5 cards can be used here to get them physically engaged in learning. With older students, words can appear on a screen, poster, or board.

• *Predictable writing.* This works best for students at the emergent level. As an individual strategy, three sentences are written with one word missing (see Figure 4). The student fills in the blank. In small group, create a large poster and have each student fill in one line. When done, students re-read the sentences until fluent.

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Things I Like to Do

I like to _____.
I like to _____.
I like to _____.
I like to _____.
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Figure 4. Predictable writing.

        • *One sentence.* With students who are struggling writers, start by asking them to write one sentence. This keeps them from being overwhelmed. To help students identify what they want to say, ask questions to solicit ideas (see Figure 5).

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1. What did you do that was fun yesterday?
2. What is something you saw on your way to school?
3. What's something you like to do?
4. What are you going to do this weekend?
5. What are you going to do at recess?
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Figure 5. Questions to elicit one-sentence writing.

        • *Syntax sentences.* Here one to three sentences are presented to students that contain grammar or word order errors. Students are called on to make the appropriate corrections. Create sentences to reinforce letter patterns, phonograms, sight words or to use as pre- and post-reading activities.
        • *Sentence combing.* Students are given two or three sentences. They must combine them while retaining the initial meaning of both (see Figure 6).

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Jill is strong.
Jill is a soccer player.

Andy is in the living room.
Andy spilled his milk.
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Figure 6. Sentence combining.

        • *Sentence alteration.* Students are given a sentence and asked to say the same thing using different words or a different word order (see Figure 7).

> Please fill my glass.
> Fill my glass please.
> Will you fill my glass?
> Can you fill my glass?
> Put more in my glass.
> My glass needs filling.
> You should fill my glass.

Figure 7. Sentence alteration.

• *Sentence elaboration*. Students are given a sentence and asked to make it more interesting or different (see Figure 8). Encourage unique, creative, and humorous ideas here. Sentence elaboration, alteration, and combining can all be done orally or in writing. They can also be used as pre- or post-reading activities.

> The man cooked burgers on the grill.
> The old man cooked burgers on the huge grill.
> The boy cooked delicious burgers on the rusty grill.
> The young man cooked hotdogs on the stove.

Figure 8. Sentence elaboration

Again, since the focus is on grammar, sentence structure, and word order, all the activities above can be used to develop the syntactic cueing system. They can also be used to reinforce letter patterns, phonograms, or sight words. Writing activities should be kept simple and brief.

2. Word Work.   Like writing, word work comes in a variety of forms. The goal here is to strengthen letter-sound relationships (Cunningham & Cunningham, 2002; Erickson & Kopenhaver, 1995). This should be one part of the total intervention for students whose deficit area is word identification. The activities described here are based on common letter patterns and word families. Sometimes called large unit phonics or decoding by pattern, this focus helps to develop students' ability to identify words by analogy (Allington, 2002; Cunningham & Cunningham, 2002). These are the types of activities used with this meaning-based intervention:

•*Word-building*. Word-building activities are used to develop the ability to see letter patterns or parts of words. Here students are given an initial letter sound and a word family and asked to put them together to create a word.

• *Word discrimination*. This is another type of large unit phonics activity that is used to develop students' ability to recognize target letter patterns within words. Here, students are

presented with two words, one of which has the target letter pattern. Students are asked to quickly point to and read the word that contains the target letter pattern.

• *Word wall riddle review.* Students are given a simple riddle. The answer is contained on a word wall with six to ten choices, all of which contain the targeted letter patterns. They must select an answer from the word wall.

• *Sentence dictation*. The teacher (or partner) reads a simple sentence to students containing at least one word with the target letter pattern. Students write the sentence. After each sentence, students look for and underlines words that "do not look right". Then students are shown the complete sentence with correct spellings. They cross out the misspelled words and write the correct spelling on top. When correct spellings are in place, students read until fluency is achieved.

• *Sentence replay* (replay analysis). Students are presented three to six sentences on a piece of paper. Each sentence contains at least one word with the target letter pattern. Students read aloud and record these sentences using an audio recorder. Then, they listen to the recording and underline any miscues or stumble words. Next, they review the words, reread, and record the sentences. This process is repeated until fluency is achieved with no miscues or stumbles.

3. Cloze and maze activities. Cloze and maze activities are used to develop the semantic cueing system (Paulson & Freeman, 2003). The theoretical and empirical support for these activities is strong (Ricketts, Davies, Masterson, Morag, & Duff, 2016). Eye movement and miscue analysis research show that expert readers do not attend to every letter (Paulson & Freeman, 2003; Weaver, 2009); instead, they use minimal letter clues along with context (semantics), background knowledge (schemata), and syntax to create meaning with print (Binder, Duffy, & Rayner, 2001; Goodman, Fries, & Strauss, 2016; Hruby & Goswami, 2013; Rayner & Well, 1996). As well, semantics-based activities like cloze and maze have been shown to enhance students' reading fluency (Berends & Reisma, 2004). It is recommended that cloze and maze activities be included in every intervention session for students whose deficit area is word identification.

• *Cloze*. Here, students are shown a sentence that has one word with just the beginning letter showing. They are asked to read the sentence and identify a word that makes sense within that sentence. Finally, students are shown the complete sentence and asked to re-read it until fluency is achieved. Students should be show six to eight sentences during a single session. Also, cloze sentences can be designed to reinforce word families or letter patterns.

• *Maze*. Maze activities are similar to cloze activities except that a maze provides students with three choices of target words from which to choose, only one of which makes sense within the context of the sentences or story. For older students, a maze mini-story is used. The maze mini-story provides maze sentences in the context of a six to eight-sentence story.

4. Fluency activities. Automatic word recognition (automaticity) frees up space in short term memory for comprehending (Allington, 2012; Rasinski & Samuels, 2011). Repeated

reading activities are one method that can be used to develop automaticity (Kuhn & Stahl, 2013; Samuels, 2013). Here students improve their ability to quickly recognize words and process letter patterns through reoccurring practice of the same text. Repeated reading activities can be done individually, with partners, in small group, or in a whole class group setting. Below are some examples of repeated reading and other fluency activities used with this meaning-based intervention. If fluency is a deficit area, one of these activities should be done every session.

• *Words per minute (WPM).* Students are given a piece of text at their independent reading level and asked to read it three times for one minute each. The number of words read is recorded after each attempt. The goal is to read and pronounce as many words as possible in one minute. You are not concerned about comprehension here, just speed. (There are other places to focus on comprehension.) Finally, students record the three WPM scores on a line graph. If one minute is overwhelming, you can use word per half-minute (WPH) scores.

• *Pairs and small group WPM.* In working with pairs and groups, assign each student a partner and a text. Students' texts should be different from their partner and at their independent reading level. On a common signal one partner reads while the other follows along to make sure every word is read and to help identify problem words. Stop the readers after the allotted time. The non-reading partner should count and record the number of words read. Also, take a minute for the pairs to review problem words. Repeat this two more times and then switch roles. Students then record their times on a graph.

• *Short Passage Fluency* (SPF). The SPF activity is a repeated reading activity in which students are given a short passage of approximately 60 to 70 words. The 30th, 40th, and 50th word is underlined or marked. Depending on students' level, they are to read to their designated mark. Students orally read thee passage three times. The duration of each attempt is recorded. Students then record their three times on a line graph (instead of the number of words). When students are consistently able to read the section at approximately 12 seconds, they move up to the next mark.

• *Scaffolded oral reading (ScORe).* Scaffolded oral reading (ScORe) can be used in large group, small group, or individually. This technique is similar to the neurological impress method (Flood, Lapp, & Fisher, 2005; Young, Mohr, & Rasinski, 2014). Here you and the student read the text together aloud. You act as a scaffold by reading just milliseconds ahead of the student in order to maintain a steady, comfortable pace. If a student pauses or stumbles, you keep reading. The student will rely on your voice to act as a scaffold in identifying words during the process of reading. Read using a quiet voice, providing just enough structure to keep the pace moving. If the student seems to be reading fluently, provide less scaffolding by sounding out just the beginning sounds of some words or by dropping out completely of others. This strategy can be used individually or in small groups.

5. Cognitive processes related to comprehension. Comprehension involves thinking (Jennings, Caldwell, & Lerner, 2010; Paulson, Flurkey, Goodman, & Goodman, 2003). Figure 9 lists some of the thinking processes (cognitive operations) used by effective readers (Learned,

Stockdill, & Moje, 2013; Lipson & Wixon, 2009, Tompkins, 2011; Brown, Palinscar, & Armbruster, 2013). Students' comprehension is improved by improving the thinking that occurs during the process of reading (Almasi, et. al., 2011; Dole, Nokes, & Drits, 2009; Martin & Kuke, 2001). To do this, use the cognitive operations identified below were used to design pre-, during-, and post-reading activities. The related thinking skills were taught so that students employed the cognitive operations automatically as they read. Below are examples of three thinking skill activities that are used to develop cognitive processes related to effective comprehension.

1. compare	7. problem solve	13. predict
2. respond aesthetically	8. analyze	14. recognize story
3. infer	9. evaluate	grammar
4. identify important ideas or	10. make	15. reflect: metacognition
themes	connections	16. visualize
5. Identify supporting details	11. order	17. question
6. identify cause-effect	12. inductive	18. summarize
relationships	analysis	

Figure 9. Cognitive operations used by effective readers.

      • *Story grammar.* Story grammar refers to structural elements of a story such as characters, setting, events, conflict or problem, and resolution. Start with just three basic story grammar elements: characters, settings, and events. As a pre-reading activity, introduce some of the basic story grammar elements. This provides students a sense of the story before reading and enhances comprehension. Then ask students to identify and record the other elements as they are encountered in the story.

      • *Predicting.* Effective readers naturally predict as they are reading. However, predicting is different from guessing. Predicting uses clues or background information to calculate or deduce what might happen. Stop at a designated point in the story or at the end of a chapter. Give students a prediction question. Example: "*What do you think will happen when ...*" Before making a prediction, students need to list at least two story clues and any background knowledge they think is important. Then, they should make their prediction based on the story clues and background knowledge.

      • *Inference.* Good readers go beyond the descriptions found in the story or text to fill in some of the story details as they are reading in order to understand ideas not explicitly stated in the text. Like prediction above, an inference is not simply a guess. It is an extension or conclusion based on known information. As a pre-reading activity, provide an inference question. Tell students to identify and list clues that might help them make this inference as they are reading. After reading the story students should list their inference.

6. Self-selected reading practice. Wide reading is one of the best methods to enhance students' comprehension, word identification, and fluency skills (Allington, 2012; Krashen, 2004). It is recommended that every session end with reading practice using text at students' independent level or below. This reading practice will enable students to practice newly learned skills in authentic reading contexts.

Progress Monitoring

It is recommended that progress monitoring occur every two to three weeks. For this meaning-based intervention the following types of measures are used for progress monitoring:

• **Fluency.** Daily fluency scores are used here to document students' progress.

• **Word identification.** Word identification are assessed using two types of measures. The first is a simple pre-, post-measure that includes sample of words containing the target letter patterns addressed during word work. The second type of measure is a running record using graded readers. The same reading passage is used as a pre- and post-measure.

Comprehension. Comprehension is assessed two ways. The first is a story retelling chart. Here, students read and are asked to recall basic story elements related to characters, events, and settings. Points are earned for prompted and unprompted responses. The second form of assessment for comprehension is a maze as described above. The maze is used as a screening device, but it can also be used for progress monitoring.

TIER 3: INTENSIVE INTERVENTIONS AND COMPREHENSIVE EVALUATION

If students are not making adequate progress in Tier 2, they are targeted for a Tier 3 intervention. Tier 3 should build upon Tier 2 instruction to the greatest degree possible. The main difference between Tier 2 and Tier 3 is that Tier 3 should be more frequent and intensive, (Swanson & Vaughn 2011). Students not making the desired level progress in response to the Tier 3 intervention should then be referred for a comprehensive evaluation to see if they are eligible for special education services under the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 (NCLD, 2016).

Tier 3 is often synonymous with special education; however, RTI was specifically designed to avoid special education labels and services. The Individuals with Disabilities Education Act (IDEA) calls for Tier 3 interventions to be delivered primarily in a general education setting by a general education teacher and additional staff. If special educators do become involved at this level, the International Reading Association (2010) recommends that literacy/reading specialists and coaches provide leadership in every aspect of the RTI. There must also be careful planning and continued communication with all parties in all phases.

The final point here in regards to special education is this: Tier 3 is where students need the most highly qualified reading teachers. In special education settings students rarely get improved access to expert, intensive reading instruction (Allington, 2011). That is, special education teachers often do not have the expertise in all aspects of reading instruction that reading specialists and elementary education teachers have. Also, in special education programs

for learning disabilities students rarely experience accelerated reading once they begin special education services (Allington, 2011; Bentum & Aaron, 2003; Denton, Vaugh, & Fletcher, 2003; Scanlon, 2013). Thus, if special education teachers become involved as part of Tier 3, it should be under the guidance of a reading/literacy specialist.

DISCUSSION

The article has provided a description of all aspects of RTI as it relates to reading and included a variety of research-based strategies that can be used to help struggling readers. One of the strengths of RTI is its flexibility (IRA, 2010). It is expected that there will be wide variation in how these regulations are interpreted and implemented. However, to be successful any RTI plan must be (a) pragmatic, (b) economical, and (c) effective. The meaning-based approach to RTI described in this article meets these criteria. Below are described the theoretical assumptions upon which this meaning-based intervention is based and the distinction between instructional programs, methods, and plans as it relates to reading interventions and remediation.

Theoretical Assumptions

Most reading interventions are based on a phonological model of reading in which reading is considered simply sounding out words. The instructional emphasis here is on decoding. This reflects a bottom-up conception of reading in which the processing of text is seen to move in a single direction, from letter-sounds, to words, to meaning in part-to-whole fashion. The types of interventions based on this model can be effective in increasing scores on letter-sound tests, but their ability to enhance students' ability to create meaning with print is questionable (Pearson & Hiebert, 2013). Also, these types of interventions have two major problems: First, not all struggling readers struggle with word identification. Deficits could be in one or more of three reading areas: word identification, fluency, and/or comprehension. If word identification is not a deficit area, it would be highly ineffective to have an intervention focusing solely on this area. Second, of those who struggle with word identification, phonics represents only one of three cueing systems used by the brain to create meaning with print. To fully develop students' ability to identify words while reading, equal instructional emphasis should be placed on developing all three cueing systems: the phonological, semantic, and syntactic.

The meaning-based intervention described in this article is based on a neurocognitive model of reading in which reading is considered to be creating meaning with print (Johnson, 2016). The instructional emphasis here is on developing students' ability to create meaning using print. Described as an interactive process, reading is seen as a both top-down and a bottom-up process. Higher-level cognitive processes (top) interact with lower-level letter identification skills (bottom) in order to create meaning during the act of reading. This interactive process is enhanced by teaching cognitive processes as well reading sub-skills within meaningful contexts to the greatest extent possible. This meaning-based intervention enables teachers to plan reading interventions based on students' specific deficit areas. Also, word identification activities are designed to develop all three cueing systems.

Not a Program or Method

An instructional program usually refers to a replicable set of activities or methods that are designed to achieve a specific instructional goal. The key term is here replicable. Meaning that there are specific steps to be followed in a specific sequence in a specific way with the understanding that if these steps are repeated with fidelity, a similar outcome (achievement of the goal) will occur. An instructional method or (method of instruction) usually refers to a specific set of techniques that are used in a prescribed fashion for instruction in a specific subject area (example: math methods, reading methods, etc.).

Many still cling to the notion that if they can find just the right program or method and if they follow the instructions on the back of the package exactly as they are written, then they will successfully achieve all their desired educational outcomes. However, the problem with this line of thought is that the students we encounter are not standardized educational products. Hence, there is no standardized program or method that works best for all students all the time.

The meaning-based intervention described in this article is not a program or method.   It is a plan that includes many research-based strategies that can be used as needed. It should not be standardized. This distinction is important because each of the strategies is useful in some places with some students, but not in others. Each strategy should be adopted and adapted to meet the needs of the students with whom you are working. None of the instructional strategies described in this article should ever be used as the sole means of instruction. To do so is to reduce teaching to a formula.

This brings us to the notion of fidelity, often considered an important element when implementing reading interventions and remedial programs. Fidelity here is not narrowly defined as strictly following a teaching recipe. Instead, fidelity is defined here as correctly applying the research-based principles related to literacy learning. The idea that any instructional intervention could be algorithmic in nature and uniformly applied with the assumption that all students would achieve a predetermined end is at best, highly implausible. Therefore, a basic structure has been provided here to enable teachers this meaning-based intervention; however, individual plans for each student should always be based on valid diagnostic data as well as formative observations and evaluations. In this way, all students can achieve their full literacy potential, which is the ultimate educational outcome of any literacy program, plan, or curriculum.

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