Reading Horizons
Where reading momentum begins

Reading Horizons RESEARCH BASE

Reading Horizons aligns to the research-based best practices of effective reading instruction.

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INTRODUCTION

The Reading Horizons Methodology

The Reading Horizons method delivers engaging, explicit, systematic phonics instruction through a multisensory approach based on Orton-Gillingham principles. Instruction is cumulative and organized in a sequence that enhances learning and simplifies teaching. Each sound of the English language is explicitly taught along with the letter(s) that represent the sound. Five Phonetic Skills are taught to help students recognize short and long vowel patterns in words and syllables. Two Decoding Skills are presented to show students how to decode multisyllabic words.

The multisensory approach used with the Reading Horizons method enhances learning and memory by engaging auditory, visual, and kinesthetic modalities simultaneously during instruction. A unique marking system is employed to draw student attention to the features and patterns of English as well as to give visual cues for pronunciation. Throughout the course of instruction, students are provided with engaging activities for practice and application of the skills learned.

Reading Horizons Discovery™ was designed to teach the Reading Horizons method to students in kindergarten to third grade. *Reading Horizons Elevate™* was designed for students who are ages fourth grade to adult.

Research Alignment

This overview of research outlines the way in which the Reading Horizons method relates to each of the five pillars of effective reading instruction as identified by the National Reading Panel (NRP; National Institute of Child Health and Human Development [NICHD] in 2000) as well as to handwriting, spelling, and multisensory literacy instruction. The overview will conclude with research that provides the rationale for the use of explicit phonics instruction with various types of learners, including emerging readers (kindergarten through third grade), struggling readers (fourth through twelfth grade), adult learners, students with dyslexia, and English Language Learners.

ALIGNMENT TO **NATIONAL READING PANEL** FINDINGS

Elements of effective reading instruction as reported by the National Reading Panel (NICHD, 2000) are well established in literature. Empirical studies confirm that instruction that builds phonemic awareness, decoding skills, text-reading fluency, vocabulary, and comprehension is the best antidote for reading difficulty (Fletcher, Lyon, Fuchs, & Barnes, 2007; Foorman & Moats, 2004).

Instruction delivered through the Reading Horizons method not only helps prevent reading difficulty by establishing necessary foundational skills for all learners but also provides a remedy for readers who struggle with the task of decoding. Mastery of the concepts taught in Reading Horizons programs empowers students with the ability to successfully decode the great majority of words they encounter in printed text. Instruction in the Reading Horizons method also enhances other areas of reading development.

Phonemic Awareness

Phonemic awareness (PA) is the ability to identify and manipulate phonemes (individual sounds) in spoken words (Liberman, Shankweiler, Fischer, & Carter, 1974) and is one of the best predictors of reading success (Langenberg, 2000; Muter, Hulme, Snowling, & Taylor, 1997; Stuart & Masterson, 1992). Phonemic awareness instruction does not require use of printed words or letters. However, a meta-analysis conducted by Bus and van IJzendoorn (1999) revealed that programs combining graphemes (letters) with phonemes (sounds) during instruction were more effective than phonemic awareness training alone. Phonemic awareness is necessary for all readers to be successful, although it is only a beginning step in learning to read (NICHD, 2000).

In the Reading Horizons method, phonemic awareness is addressed prior to phonics instruction. Seven areas of phonemic awareness (rhyming, syllable counting, initial sounds, blending, final sounds, medial sounds, and segmentation) are addressed in *Reading Horizons Discovery*. Three areas of phonemic awareness are addressed in *Reading Horizons Elevate*.

The Reading Horizons method provides explicit instruction in the 42 sounds of the English language. As each phoneme (sound) is instructed, the grapheme (letter or letter combination) that represents each sound is explicitly taught, strengthening phonemic awareness and laying the foundation for fluent decoding.

Phonics

Proficient reading is the ability to identify individual words quickly and accurately (Adams, 1990; Ehri, 1998; Perfetti, 1985; Rayner & Pollatsek, 1989; Snow, Burns, & Griffin, 1998). This is sometimes referred to as reading by sight. Mastery of letter-sound correspondences aids in the successful identification of words.

from listening to spoken language (Nagy & Anderson, 1984).

Phonics bridges the gap between spoken words that students know and written words that students may not recognize. The ability to accurately decode words enables students to learn new words they encounter in print. The more students analyze, read, and write the same words, the stronger the memory, and the faster the recognition (Ehri, 2004).

The Reading Horizons reading system not only allows for accuracy in reading and spelling words but also addresses word meaning and usage. Each word that is introduced during direct instruction is used in the context of a sentence, giving teachers the opportunity to address the meaning of each word while increasing students' speaking vocabulary.

As teachers instruct students in the Reading Horizons method, those students will be empowered with the skill to accurately decode known and unknown words they encounter in text, giving them the opportunity to add to their reading and speaking vocabularies. Both *Reading Horizons Discovery* and *Reading Horizons Elevate* interactive software programs have a vocabulary section in which thousands of words are available for students to learn.

Comprehension

Though phonics instruction is necessary for students who are learning to read, teaching phonics is a means to an end. The purpose of phonics instruction is to teach students to recognize words automatically and fluently so they can attend to comprehending the text (Adams, 1990; Stahl, 1992). Essential tools for reading comprehension are general language comprehension skills and accurate, fluent, word-reading skills (Gough, 1996; Torgesen, 1998; Snow et al., 1998).

About 80% of the variance in the reading comprehension scores of first graders can be attributed to the ability to sound out new words. This ability is also a good predictor of reading comprehension skill in fourth grade (Foorman, Francis, Shaywitz, Shaywitz, & Fletcher, 1997; Juel, 1994). Aaron, Joshi, and Williams (1999) found that weak word-reading skills were the primary cause of poor reading comprehension in third grade students. After at-risk readers learn necessary decoding skills, improvements are observed in all reading skills, including passage comprehension (Foorman & Schatschneider, 2003). Reading comprehension is not likely to occur when effort is expended on sounding out each word (Shankweiler et al., 1999). Torgesen (as cited in Hasbrouck, 2010) stated that "There is no comprehension strategy that compensates for difficulty reading words accurately and fluently."

Teachers who teach using the Reading Horizons method provide students with the foundational skills necessary to read for meaning and enjoyment. Throughout the Reading Horizons instruction, students develop automatic word recognition, learn the meanings of new words, and increase their ability to fluently read increasingly complex text, all of which are necessary components for reading comprehension—which is the ultimate goal of reading.

Comprehension is assessed after each passage or book is read to measure the students' ability to derive meaning from text. Reading Horizons' fiction and non-fiction reading passages and books were created with student interest in mind. Books and passages are available in print or as part of each student's individual reading library in both software programs (*Reading Horizons Discovery* and *Reading Horizons Elevate*).

described by Grace Fernald and Helen Keller. Later, Anna Gillingham and Bessie Stillman published a manual describing a structured, sequential, and multisensory teaching method based on Dr. Orton's theories, creating what is now known as the Orton-Gillingham multisensory approach to instruction (International Dyslexia Association, 2009).

In a number of research studies, multisensory instruction is proving to be more effective than traditional instruction in the areas of phonemic awareness, decoding skills, and reading comprehension (Carreker et al., 2005; Carreker, Neuhaus, & Swank, 2007; Foorman, Francis, Shaywitz, et al., 1997; Joshi, Dahlgren, & Boulware-Gooden, 2002). In one study on the development of literacy-related skills, second and third graders who received an Orton-Gillingham-based, synthetic phonics (i.e., part-to-whole) approach outperformed children who received a combined synthetic/analytic (i.e., part to whole/whole-to-part) phonics approach or a sight-word approach (Foorman, Francis, Beeler, et al., 1997).

Reading Horizons is an Orton-Gillingham-based reading program. Visual, auditory, and kinesthetic-tactile modalities are used simultaneously throughout the instructional sequence. As each letter/sound is introduced, students see it, say it, write it, and pronounce it through the process of dictation. Visual cues are also given as each vowel is taught. As instruction progresses, students continue to participate in dictation by hearing, repeating, writing, and reading each word that is dictated. Kinesthetic responses are also emphasized throughout the process of dictation through actions that focus student attention on what is being taught or practiced. In addition, a unique marking system is employed to engage students and focus their attention on the features and patterns in English as well as to give visual cues for pronunciation.

EFFECTIVE READING INSTRUCTION FOR ALL TYPES OF LEARNERS

K–3 Learners

Reading is not naturally acquired in the same way speech is acquired (Adams, 1990; Adams & Bruck, 1993; Liberman, 1992; Liberman & Liberman, 1990; Perfetti, 1991; Pressley & Rankin, 1994). Effective instruction is necessary for the development of reading skills.

A converging body of research supports explicit and systematic phonics instruction for all students (Ehri, 2004; McCardle, Chhabra, & Kapinus, 2008; Carreker et al., 2005; Joshi et al., 2002; NICHD, 2000; Ryder, Tunmer, & Greaney, 2007). The National Reading Panel found that phonics instruction is most effective when taught from kindergarten to second

is bleak. Sixty percent of America's prison inmates are illiterate and 85% of all juvenile offenders have reading problems (Greenberg, Dunleavy, & Kutner; 2007). In fact, some states in the U.S. refer to third-grade reading proficiency rates when projecting the number of prison cells that will be needed 20 years into the future (Bolton & Lavoie, 2004). A Criminal Justice Policy Council study reported that 37 percent of young prisoners were less likely to return to prison if they learned to read during their incarceration (Susswein, 2000, as cited in Keith & McCray, 2002).

Reading Horizons Elevate was created to address the needs of older students who struggle with reading. Whether their struggles are a result of poor instruction or learning disabilities, *Reading Horizons Elevate* provides all of these learners with effective instruction.

Reading Horizons Elevate offers direct instruction as well as age-appropriate, individualized software instruction. The *Reading Horizons Elevate* curriculum can be taught in any instructional setting with any combination of direct instruction and/or self-paced software instruction.

Reading Horizons Elevate reading passages and instructional materials are specific to the needs of older learners. The Reading Horizons Reading Library in the *Reading Horizons Elevate* software provides students with high-interest passages in multiple genres and hours of reading practice.

The Reading Horizons curriculum has been used successfully as intervention for students from 4th–12th grade and effective instruction for illiterate or low-literate adults and adults learning English. Many adults and juveniles in the correctional system have seen success with the *Reading Horizons Elevate* curriculum.

Dyslexic Learners

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties usually result from a phonological processing deficit and are often unexpected in relation to a student's other cognitive abilities. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge (Lyon, Shaywitz, & Shaywitz, 2003).

Seventy-four percent of children who struggle with reading in third grade remain significantly below grade level in ninth grade (Francis, Shaywitz, Stuebing, Shaywitz, and Fletcher, 1996). However, intensive, systematic, code-based reading interventions rewire the brain and yield significant gains in fluency and comprehension no matter the student's age (Shaywitz et al. 2004). If children who are dyslexic receive systematic, code-based instruction before third grade, they will have significantly fewer problems in learning to read at grade level (Lyon, 1996; Shaywitz, 2003; Shaywitz, et al., 2004).

The Reading Horizons method is an Orton-Gillingham-based, multisensory reading program that has successfully been used with students who have been diagnosed with dyslexia. The multisensory instructional approach strengthens modalities (e.g., visual, auditory, and kinesthetic-tactile) that may not have been sufficiently developed in the brain while simultaneously supporting modalities that are more developed. The Reading Horizons method can be used with dyslexic students of any age.

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Reading Horizons

Where reading momentum begins