

Research Foundations of *Voyager Passport*[™]

Marcia K. Henry, Ph.D. and Julia Peyton, Ph.D.



About the Authors:

Marica Henry, Ph.D., Educational Psychologist, has 47 years of experience in the field of reading and dyslexia, working as a teacher, diagnostician, tutor, and professor. A past president of The International Dyslexia Association and former Director of the Center for Educational Research on Dyslexia at San Jose State University, Dr. Henry speaks frequently at conferences and writes for and serves on the editorial boards of several professional journals. She provides professional development seminars on teaching reading and language arts and consults with several school districts and states on informed reading instruction.

Julia Peyton, Ph.D. currently serves Voyager Expanded Learning as the Vice President of Research and Development.

Major Contributors:

Peggy Marrin, M.A., Marcia Boone, and Janet MacPherson, Ph.D.

Introduction:

Our understanding of the reading process has changed in recent years. We now understand how students who were not able to learn to read just a few years ago can become competent readers (Shaywitz, 2003). Individuals who have difficulty learning to read come from all ethnicities and cultures. Struggling readers may have only mild problems, others may exhibit more moderate problems, and some will display severe problems acquiring reading and writing skills. Stanovich (2000) differentiated the dyslexic poor reader (those who exhibit a discrepancy in their intelligence and reading ability) with what he called the “garden variety” reading disability (without IQ discrepancy). Students who have difficulty learning to read may also struggle with spoken language (Shaywitz, 2003). All but a few students on this continuum of difficulty can learn to read through intense intervention based on research-validated instructional practices.

The purpose of this paper is to provide research findings about the process of reading and how that information has been incorporated into the *Voyager Passport*[™] reading intervention program. An overview of *Voyager Passport* will orient the reader to the components included in the reading intervention curriculum and how each component is assessed. This is followed by a discussion of the science of reading, which describes the elements of reading and incorporates information about the intervention and assessments specific to the various elements. Finally, this paper concludes with a brief discussion of Response to Intervention (RTI) and how the *Voyager Passport* reading intervention supports this initiative.

Voyager Passport Overview

Voyager Passport[™] is a comprehensive intervention system for students in kindergarten through fifth grade who demonstrate difficulty learning to read. *Voyager Passport* systematically integrates the five essential components of reading (i.e., phonemic awareness, phonics, fluency, vocabulary and comprehension) into an easy-to-deliver, cohesive instructional routine. The lesson design leverages scientifically-based research principles and facilitates instruction in a standardized protocol format. Student interest is sparked by engaging topics and text, both narrative and expository, that builds critical domain knowledge.

Voyager Passport optimizes learning time and ensures student success by adhering to an effective model of instruction. The five components of this instructional model include:

1. **Teach, Model, and Probe:** Explicitly presents the specific concept or skill to be learned and why learning this concept or skill is important, followed by modeling of the expected behavior and monitoring for student understanding;
2. **Guided Practice:** Provides a limited number of items or short tasks related to the concept or skill for supervised practice and corrective feedback as necessary;
3. **Independent Practice:** Reinforces the concept or skill with decreasing amounts of teacher support;
4. **Cumulative Review:** Integrates new content with previously learned content so students receive continual practice and reinforcement; and
5. **Assessment:** Allows teachers many opportunities within each lesson to assess student responses for content mastery.

Voyager Passport is organized into 10-lesson units called Adventures. Each Adventure begins with an Adventure Starter that introduces the concepts and connects what students know with what they will learn. Lessons 1-4 and 6-9 follow a consistent 30-minute routine beginning with Word Works, which provides explicit instructions in letter sounds, decoding, sight words, and reading controlled sentences, and ending with Read to Understand, which includes explicitly taught vocabulary and carefully structured steps that teach students how to gain meaning from text through comprehension strategies. Every fifth lesson provides an opportunity for assessment and skill review. Lesson 5 begins with a Quick Check of the skills taught in the four previous lessons. Two types of assessment are offered in Lesson 10, Vital Indicators of Progress[®] (VIP[®]) progress monitoring of these early indicators of reading acquisition and a cumulative assessment of skills taught in Lessons 1-9. Reteach opportunities are provided on Lessons 4, 7, and 9.

A robust, comprehensive assessment system is incorporated within the *Voyager Passport* Reading Intervention System. This system includes the Vital Indicators of Progress (VIP) benchmarks and progress monitoring measures developed by Dr. Roland

Voyager Passport
systematically integrates the five essential components of reading (i.e., phonemic awareness, phonics, fluency, vocabulary and comprehension) into an easy-to-deliver, cohesive instructional routine.

Voyager Passport's
flexible instructional model
accommodates diverse
learners by enabling teachers
to intensify instruction
depending upon the needs of
the students.

Good and colleagues at the University of Oregon. The VIP measures are completely equivalent to the Dynamic Indicators of Basic Early Literacy Skills (DIBELS®). VIP measures are one-minute fluency indicators to monitor growth in *Voyager Passport*. The VIP Letter Naming Fluency (LNF), Phoneme Segmentation Fluency (PSF), Nonsense Word Fluency (NWF), Reading Connected Text (RCT), and Retell Fluency (RF) are standardized, individually administered tests of reading fluency for students in kindergarten through fifth grade. VIP assessments are administered at three times of the school year, during the fall, benchmark 1, winter, benchmark 2, and spring, benchmark 3. In Lesson 10, additional probes, or alternative forms, are provided for key indicators through the year for use as progress monitoring tools.

Voyager's online data management system, called VPORT®, allows teachers to enter and store data from benchmarks and progress monitoring probes VPORT facilitates the process of monitoring progress and making instructional decisions about the level of intensity for each student, using the differentiation strategies and re-teaching opportunities provided within the curriculum.

Voyager Passport is intended for small groups of students who have not made adequate progress with core reading instruction. Students who are one to two years behind in reading need additional explicit, systematic intervention to accelerate growth. Most students will make gains with this 30-minute standard protocol of explicit and systematic instruction. However, some students, who are more than two years behind or are not responding positively to the intervention treatment, may need more intensified intervention through increased time on task, more opportunities to respond with a decreased intervention group size, different pacing, or extended examples using Reteach opportunities to become successful readers. *Voyager Passport's* flexible instructional model accommodates diverse learners by enabling teachers to intensify instruction depending upon the needs of the students.

Effective Features of Instruction in *Voyager Passport*

Voyager Expanded Learning has taken great care to design *Voyager Passport* lessons around a number of effective features of instruction such as modeling, small group work, appropriate pacing, guided and independent practice, corrective feedback strategies, judicious review, and efficient assessment. These instructional features allow teachers to maximize instructional time while students master skills efficiently. Once skills are mastered, sufficient review ensures that students maintain facility with important reading skills. When these features of instruction are incorporated in daily lessons, reading growth is at its highest (Coyne, Kame'enui, & Simmons, 2001).

All lessons in each reading component provide explicit instruction in every step of the reading process with teacher modeling followed by multiple practice opportunities. The multiple opportunities for student response throughout each lesson maximize the amount of time students spend actively engaged in the content. Small group instruction and the use of choral and individual student responses provides extensive practice for all students. In addition, students receive corrective feedback for their responses

followed by additional opportunities to respond and practice new material correctly thereby facilitating the most efficient student learning. All reading skills and strategies taught are continually reviewed within and across program levels. By integrating these features of effective instruction with the critical components of reading instruction, *Voyager Passport* provides a complete reading intervention system.

Reteaching strategies are available for diverse populations, including English Language Learners. Opportunities exist for reteaching the whole group, pairs, or individual students. Each adventure includes extra practice for reteaching as well as additional center activities and independent practice including a Home Connection. Adventure Centers provide supplemental activities for writing, word study, and vocabulary.

The comprehensive design of *Voyager Passport* makes it a solution that fits well within diverse delivery models and compliments all core reading programs. As a supplement to core instruction, *Voyager Passport* provides students who face a struggle with learning to read with explicit instruction, additional opportunities through Black Line Masters, corrective feedback, and more time on task in order to master critical reading skills.

The Science of Reading

Reading is a complex process of converting printed symbols into language and meaning, and is among the most important scholarly activities a person masters. Students require at least grade-level reading ability to read literature and textbooks in the majority of school subjects (Henry, 2003). The fact that many students fail to learn to read has prompted and made necessary new research in the field of learning.

Current research converges on the certainty that few students acquire reading naturally, and that most students benefit from explicit and direct, structured instruction (National Reading Panel, 2000). This research, based on sound, scientific observations and analyses, provides evidence for not only what instruction works, but why and how it works (Reyna, 2004). The research also supports the importance of early identification and intervention since students who are poor readers in first-grade are most apt to be poor readers in the upper elementary grades (Juel, 1988; Mathes, et al., 2005; Shaywitz, 2003). Those students who struggle learning to read are served as well in small groups of three to four students as they are individually (Torgesen, 2004; Vaughn & Linan-Thompson, 2003).

Explicit, systematic instruction provided in each of the critical reading components—phonemic awareness, phonics/advanced word study, fluency, vocabulary and comprehension—address the needs of struggling readers. Each of these critical areas are explored below, including an examination of the research, followed by an explanation of how the research findings are incorporated into *Voyager Passport*, and concluding with a discussion of what assessment is available in *Voyager Passport*.

Students require at least grade-level reading ability to read literature and textbooks in the majority of school subjects (Henry, 2003).

Phonemic awareness is presented logically and systematically, with specific instructions for explicit teaching.

Phonemic Awareness

Phonemic Awareness Research

Phonemes are the basic building blocks of spoken language and words, or the smallest units that make one word different from another (Moats, 2000). The importance of phonemic awareness in learning to read has been well established (sf. Cunningham, 1990; Liberman, 1973; Shankweiler & Liberman, 1972; Stanovich, 2000). The ability to hear and manipulate the individual sounds in words, referred to as phonemic awareness (PA), accounts for significant differences between good and poor readers. Students with strong phonemic awareness move easily into reading and spelling and understand the role phonemes play in words and how to manipulate them (Adams, Foorman, Lundberg, & Beeler, 1998). Students with poor phonemic awareness are at-risk for reading difficulties. Those students without phonemic awareness often do not attend to individual sounds and do not recognize the relationship of sounds to letters as they begin to read. Students with poor phonemic awareness who receive explicit, systematic instruction can achieve reading success. Therefore, phonemic awareness is an important component of reading instruction in kindergarten and early first grade (Ball, 1993; Blachman, 2000; Mraz, Padak, & Rasinski, 2007; Tangel & Blachman, 1995).

The most critical skills in PA are blending and segmenting (Bradley & Bryant, 1985; Cunningham, 1990; O'Connor, Jenkins, & Slocum, 1995; Torgesen, Morgan, & Davis, 1992). Students need to be able to blend sounds to form words (e.g. knowing that the phonemes /b/ /a/ /t/ make the word bat). The ability to blend correlates strongly with reading acquisition. Segmentation refers to breaking words into sounds (e.g., the word bat is made up of the sounds /b/ /a/ /t/). The ability to segment correlates strongly with reading and spelling.

Students may begin to blend and segment phonemes without knowing the actual alphabet letters, but student gains are strongest when phonemes are paired with letters or graphemes (Hatcher, Hulme, & Ellis, 1994). Sounds are ephemeral, short lived, and hard to grasp whereas letters provide concrete visible symbols for phonemes. Because of this, one might expect students to have an easier time acquiring phonemic awareness when they are given letters to manipulate (Ehri, 2004). Phonemic awareness training is most beneficial when it is combined with practice in connecting sounds to letters (Linan-Thompson & Vaughn, 2007).

Phonemic Awareness Intervention

The *Voyager Passport* reading intervention program addresses phonemic awareness explicitly in kindergarten and early first grade. Phonemic awareness is presented logically and systematically, with specific instructions for explicit teaching. Students learn to manipulate individual sounds in words in a carefully sequenced series of lessons. Students count, identify, or isolate phonemes, learning to isolate beginning, middle, and ending sounds in words. This prepares students for the key skills of segmenting and blending words and sounds (e.g., Stretch and Slide activities). As students gain facility with manipulating sounds orally, print is integrated with the phonemic awareness

activities (e.g., Stretch and Slide with Letters). Students are taught the critical elements of segmenting and blending sounds orally and then they are able to master the skill of matching sounds to letters. These critical phonemic awareness skills are well integrated within each lesson so that students learn to segment and blend the sounds of language, match sounds to letters, and have ample time to practice and demonstrate their learning. Additionally, these integrated activities transition to phonics and spelling activities so students can apply what they have mastered in phonemic awareness.

Phonemic Awareness Assessment

Assessment and intervention are closely intertwined in *Voyager Passport*. Vital Indicators of Progress, (VIP) is a series of easy and extremely dependable oral assessments that provide immediate feedback on the reading progress of each student, classroom, and school. By consistently evaluating each student's progress, the teacher is able to identify which students will require additional support in phonemic awareness. The first skill assessed in phonemic awareness is a student's ability to recognize and produce the initial sounds in an orally presented word. VIP contains a measure, Initial Sound Fluency (ISF), for this skill in the kindergarten program. For the later part of kindergarten and through first grade, students are measured with Phoneme Segmentation Fluency (PSF). The VIP measure PSF is a standardized, individually administered test of phonological awareness (Good, Gruba, & Kaminski, 2001). The PSF measure assesses a student's ability to segment three- and four-phoneme words into their individual phonemes fluently. The PSF measure has been found to be a good predictor of later reading achievement (Kaminski & Good, 1996). PSF is measured at the second and third benchmark in *Voyager Passport* Level A (Kindergarten) and at all three benchmark periods in *Voyager Passport* Level B (Grade 1).

Phonics/Word Study

Phonics/Word Study Research

Phonics instruction, the systematic use of sound-symbol relationships to teach the reading and writing of words, builds on phonemic awareness. Understanding that spoken words are made up of individual speech sounds provides a conceptual foundation for understanding the alphabetic principle (i.e., that letters, or graphemes, correspond with sounds, or phonemes) (Brady, in press; Moats, 2000). The goal of phonics instruction is to teach students the relationships between spoken sounds and printed letters for use in decoding and spelling words (Chall, 1967).

Systematic and explicit instruction in phonics is the most effective way to ensure appropriate reading growth in students (Ehri, 2004; National Reading Panel, 2000). The direct teaching of a planned sequence of sound/symbol relationships and explicit practice in reading and spelling words improves students' word recognition, spelling, and reading comprehension (Christensen & Bowey, 2005). As young students become aware of the alphabetic principle, the relationship of sounds to letters, they need to learn the single-letter consonants as well as consonant blends and consonant digraphs. Beginning readers need to learn short and long vowels and the –r controlled vowels

**Assessment and intervention
are closely intertwined in
Voyager Passport.**

and vowel digraphs. Knowing these common patterns automatically enhances both decoding and spelling (Henry, 2003; Moats, 2000). Another strategy useful in phonics instruction is that of onset-rime (Ehri & Robbins, 1992; Goswami, 1986; Goswami & Bryant, 1990). In one syllable words, the initial consonant sound is the onset and the final vowel-consonant is the rime. Certain rimes such as at, op, and ack are useful to know as they appear in many words.

Students benefit by recognizing many common sight words. A sight word is one that is read automatically, as a single unit, from memory (Ehri, 2005). Words like *run*, *jump*, *stop*, and *cry* are words that are used frequently in early reading materials. These words are phonetic with regular letter-sound correspondence. However, phonics doesn't work for all words. Words like *from*, *little*, *want*, *what* and *they* are non-phonetic and must be memorized; thus they are referred to as sight words.

Students in the upper grades also benefit by learning syllable patterns as well as the common morpheme (or meaning) units such as prefixes, suffixes, and some Latin and Greek roots (Ehri, 2005; Graves, 2004; Henry, 1988; 2003). Learning these patterns assists students in not only decoding and spelling words, but in understanding their meaning. This link to vocabulary is especially useful. Words with Latin roots are found extensively in literature and social studies text, while the Greek roots aid comprehension of math and science terms.

Phonics/Word Study Intervention

Voyager Passport utilizes the extensive research base in phonics to develop systematic and explicit phonics and spelling lessons beginning in kindergarten. The phonics sections provide multiple exposures to specific patterns and words. Consonant and vowel patterns represent all the productive patterns that need to be taught. In addition, word families are presented as well as non-phonetic sight words. *Voyager Passport* Levels B, C & D (Grades 1, 2, and 3) provide numerous opportunities for practice reading and spelling both phonemically regular and irregular words. The instruction builds in difficulty through third grade, incorporating letter combinations, affixes, and strategies for decoding multisyllabic words. Words with irregular spelling patterns are also taught explicitly and incorporated in review. Most prominently, the phonics and spelling instruction in *Voyager Passport* is directly linked to word, sentence, and passage reading. *Voyager Passport* Levels E and F (Grades 4 and 5) contain more advanced level word study, including Latin and Greek morphemes.

Students receive immediate practice applying newly learned phonics skills in text. The text in *Voyager Passport* has been carefully constructed to correspond with the phonics skills students are learning while engaging them in interesting topics. The progressive sequence allows learning in which students can be 100% successful with word and passage reading. In addition to reading words, students apply their phonics skills to spelling and writing. The frequent application of phonics to both reading and the reciprocal skill of spelling strengthen the knowledge students have about the sound-symbol system.

The text in *Voyager Passport* has been carefully constructed to correspond with the phonics skills students are learning while engaging them in interesting topics.

Phonics/Word Study Assessment

Teachers using *Voyager Passport* have additional opportunities to assess student progress in both reading and spelling. The VIP measure Nonsense Word Fluency (NWF) is a standardized, individually-administered test of the alphabetic principle—including letter-sound correspondence—and of the ability to blend letters into words in which letters represent their most common sounds (Kaminski & Good, 1996). NWF is measured at the second and third benchmarks in *Voyager Passport* Level A (Kindergarten), all three benchmarks in *Voyager Passport* Level B (Grade 1), and at the first benchmark for *Voyager Passport* Level C (Grade 2) to identify underlying basic decoding challenges. There is strong empirical support for the use of measures of pseudo-word (nonsense word) reading to assess the alphabetic principle (Good, Baker, Peyton, in press). Numerous studies have reported substantial correlations between the ability to read pseudo-words and the ability to read real words (e.g., Bowey & Underwood, 1996). Additional assessments on letter-sound correspondence, regular word reading, and sight word reading are provided in the Quick Check in Lessons 5 and 10 of each Adventure.

Fluency

Fluency Research

“Fluency is, in a sense, a bridge between phonics and word decoding on one hand, and vocabulary (word meaning) and comprehension (passage meaning) on the other” (Rasinski, 2006, p. 62). In order to succeed in school, students must read with automaticity which involves “miles on the page.” (Moats, 2005a, p. 6). Reading fluency depends on the development of many underlying processes that must be so well learned that they can be carried out effortlessly. Fluency refers to a level of accuracy and rate where decoding is relatively effortless and where oral reading is smooth and accurate with correct expression (Wolf, 2001). Wolf (2007) further describes fluency as “not a matter of speed; it is a matter of being able to utilize all the special knowledge a child has about a word—its letters, letter patterns, meanings, grammatical functions, roots, and endings—fast enough to have time to think and comprehend” (pp. 130-131). Fluency is a key component of successful reading. Fluency and comprehension, although separate processes (Wolfe & Nevills, 2004), are mutually intertwined. That is, fluency is both a cause and a consequence of comprehension.

Before students have the necessary skills to read connected text, fluency instruction should include the building blocks of reading, including letters or sounds and reading regular and sight words automatically. Once students can read connected text, guided instruction in the form of oral reading using choral, echo, and repeated reading with feedback are effective practices for improving fluency and reading achievement (Chard, Vaughn, & Tyler, 2002; Homan, Klesius, & Hite, 1993; National Reading Panel, 2000). In fact, feedback from peers or teachers while reading is an essential component of fluency instruction.

Fluency Intervention

Voyager Passport is specifically designed to incorporate all of the research findings for effective fluency instruction. Fluency is specifically addressed in every *Voyager Passport*

***Voyager Passport* is specifically designed to incorporate all of the research findings for effective fluency instruction.**

Vocabulary is directly related to reading comprehension as students try to make meaning of the words in text.

lesson from kindergarten through fifth grade. *Voyager Passport* begins fluency instruction in kindergarten linking it with early reading tasks including naming letters, naming sounds, and reading words. As students develop more advanced reading skills, fluency instruction and practice focuses on text-level reading. Teachers model appropriate reading rates and expression. Students repeatedly read passages aloud with feedback and support to improve their reading rate. Finally, timed readings, including paired reading in Extra Practice, motivate and challenge students to improve their fluency while monitoring their own progress.

Fluency Assessment

Fluency measures are the foundation of the Vital Indicators of Progress (VIP). Oral Reading Fluency, as measured by the VIP measure Reading Connected Text (RCT) is based on the work on Curriculum-Based Measurement by Stan Deno and colleagues through the Institute for Research on Learning Disabilities, University of Minnesota and developed by Dr. Roland Good and colleagues at the University of Oregon. Oral reading fluency is a quick, reliable measure that correlates highly with reading comprehension (Deno, 1985). Fluent reading indicates the ability to free resources to focus on meaning; therefore students who are fluent readers typically comprehend well, understanding what they read. Oral reading fluency is the most frequently used curriculum-based measure of reading competence and comprehension (Good, Simmons, & Kame'enui, 2001). RCT is included in the VIP measures beginning at the second benchmark in *Voyager Passport* Level B (Grade 1) and is provided for all three benchmarks and progress monitoring opportunities in *Voyager Passport* Level C (Grade 2) through *Voyager Passport* Level F (Grade 5).

Vocabulary

Vocabulary Research

Vocabulary refers to the words a person understands and uses in listening, speaking, reading, and writing. Vocabulary is directly related to reading comprehension as students try to make meaning of the words in text. Nagy (2007) supports a metalinguistic hypothesis for the vocabulary-comprehension connection. He suggests "...that some of the variance shared by vocabulary knowledge and reading comprehension can be attributed to metalinguistic abilities that impact both" (p. 71). Metalinguistic awareness has been defined as the ability to think about and reflect on the nature and function of language (Henry, 2003).

Students learn word meanings through direct and indirect experiences with oral and printed language (Beck, McKeown, & Kucan, 2002; National Reading Panel, 2000). Graves (2006) suggests that there are four components of an effective vocabulary program: "...(1) providing rich and varied language experiences; (2) teaching individual words; (3) teaching word-learning strategies; and (4) fostering word consciousness" (p. 5).

Students need to have many opportunities to engage in discussions of new experiences and to learn new words to build on their previous knowledge. One effective avenue

for building students' oral vocabulary is through interactive teacher read-alouds where teachers read to students and engage them in meaningful discussions to fill in domain knowledge around new words and concepts while connecting the new knowledge with students' previous experiences (Graves, 2006).

Students benefit from learning word meaning strategies in five specific areas that often are problematic for students who struggle learning to read. These include learning about (a) available clues such as context clues and structural clues; (b) dictionary definitions and thesaurus entries; (c) semantic relationships such as antonyms and synonyms; (d) multiple meanings of many words; and (e) appreciation of figurative language (Henry, 2006, Fall). Direct instruction of specific word meanings is also necessary to increase student exposure to novel words (Brett, Rothlein, & Hurley, 1996). Direct vocabulary instruction is most effective when words are selected and incorporated in text based on their usefulness in language and importance to comprehension (Beck, McKeown, & Kucan, 2002; McKeown & Beck, 2004). Repeated exposure to new vocabulary in a variety of contexts and varied opportunities to engage in independent reading are also vital to ensuring significant student reading gains (Kame'enui & Baumann, 2004; Robbins & Ehri, 1994). Informational text usually carries a heavier vocabulary load than does text found in literature. This more technical vocabulary requires linkages to content areas such as science, math and social studies (Pearson, Hiebert, & Kamil, 2007).

Vocabulary Intervention

New vocabulary is introduced in the very first lesson of *Voyager Passport* Level A (Grade K) Adventure 1 and continues throughout the series. Students use the new words as they read them in a variety of contexts and practice spelling them. Research-based content and practice related to word association, structural and context clues, and multiple meanings are available. Active learning through teacher/student discussions enhances the lessons. *Voyager Passport* addresses vocabulary instruction both directly and indirectly as the research suggests. A carefully planned sequence of word introduction is skillfully meshed with read-alouds, student passage reading, comprehension activities, and text discussions. This design allows repeated exposure to new vocabulary in a variety of contexts using oral and written language. Students also use the dictionary to complete assignments and increase exposure to novel words.

In kindergarten and first grade, specific high-utility words are identified for instruction. These words are incorporated in read-aloud stories and discussions with students to extend the meanings of the words taught. Discussion points and questions allow students to examine new words while also connecting these words and concepts to their prior knowledge. Additionally, the newly taught words are repeated throughout the week in daily stories to allow ample practice opportunities while at the same time, providing different contexts to reinforce learning and clarify word meanings.

In second and third grade, a similar system is used, but students read the stories with the teacher. At these grade levels, vocabulary words are taught in Read to Understand as

Words are incorporated in read-aloud stories and discussions with students to extend the meanings of the words taught.

Comprehension can be improved as students contrast the elements of narrative and expository text and apply specific comprehension strategies, including becoming more metacognitively aware as they monitor their own reading.

part of the passage reading and comprehension section of the word study component. Strategies include direct teaching of word meanings, identification of unknown words, reading target words in passages for context clues, and discussing word meanings along with passage meanings. High-frequency, useful words have been selected to extend students' vocabulary in contexts that will most effectively assist in their reading growth. In the upper grades, students work on specific topics such as descriptive words and dictionary use. They learn prefixes, suffixes, and common roots to expand vocabulary knowledge. In each lesson, new word meanings are directly taught, practice opportunities are provided, contextual uses of the words are identified, and words are utilized in passages, allowing for integrated discussion of word and passage meanings. Students then interact with these words in new contexts in subsequent lessons.

Vocabulary Assessment

Voyager Passport embeds opportunities to evaluate student vocabulary acquisition through the Adventure Checkpoints on every 10th lesson. These criterion-referenced assessments measure specific words and vocabulary skills that have been taught in the current Adventure. The assessments help teachers monitor student growth in acquiring a more complex lexicon and their ability to determine the meaning of words in context.

Comprehension

Comprehension Research

Comprehension is the ability to understand and gain meaning from language. It is closely related to students' background knowledge. Snow, Burns & Griffin (1998) asserted that the child needs both background knowledge and conceptual sophistication to understand the meaning of a word or text. Students extract meaning as well as construct meaning as they build representations and gain new meaning (Snow & Sweet, 2003). Listening comprehension refers to gaining understanding through spoken language while reading comprehension refers to gaining understanding through written language. Comprehension abilities are the direct result of active reading in which readers think about their reading, making connections and inferences to understand text.

Comprehension can be improved as students contrast the elements of narrative and expository text and apply specific comprehension strategies, including becoming more metacognitively aware as they monitor their own reading. Other strategies include teaching students to: preview the text and make predictions; organize and retell information presented; recognize story structure; generate questions about the text; identify main ideas and summarize text passages; engage in self-questioning and visualization; and confirm or revise predictions (Carlisle & Rice, 2002; National Reading Panel, 2000; Pressley & Wharton-McDonald, 1997; Rosenshine, Meister, & Chapman, 1996).

Comprehension instruction should begin with listening comprehension when students first begin reading instruction. Early listening comprehension instruction makes the transition to reading comprehension more efficient. High-level comprehension

strategies such as making inferences can be learned through direct teaching and practice with teacher-read stories (Grant, Elias, & Broerse, 1989). Comprehension instruction continues as students begin reading text. Text structure, the organization of sentences, paragraphs, and the total discourse, strongly effects comprehension (Chambliss & Calfee, 1998).

Students need to learn the elements of both narrative text and expository text. Teacher-directed, overt and explicit reading comprehension instruction should include the use of modeling, thinking aloud, questioning, summarizing, and other techniques that promote active construction of meaning (Moats, 2005b). In addition, increasing the amount of time spent in reading appropriate level texts with teacher supports (or scaffolds) results in not only improved word reading but in comprehension as well (Kuhn et al., 2006).

Comprehension Intervention

Voyager Passport utilizes the most effective research-based comprehension instruction at all grade levels, prioritizing those skills with the largest effect size. Numerous opportunities exist for targeted discussion and activities related to gaining comprehension. By teaching critical strategies for understanding text, teachers give struggling readers the tools they need to read grade-level texts. *Voyager Passport* focuses on the skills most struggling readers lack, teaching them with intensity and deliberation as well as providing ample practice to close the gap between struggling readers and their classmates.

The combination of read alouds and accessible text provides an appropriate blended format for teaching comprehension instruction. Teachers emphasize both listening and reading comprehension. Students often choral read with their teacher, and then retell the story in their own words. As students gain facility with listening comprehension and begin reading more difficult text, reading comprehension becomes the main focus. The comprehension strategies are explicitly taught in small, sequential steps and modeled by the teacher. Students then implement and practice strategies with text read by the teacher (listening comprehension) and text read by students (reading comprehension). All comprehension techniques are reviewed frequently throughout the program so students receive multiple practice opportunities and retain mastery. Recommendations from the National Reading Panel (2000) are clearly reflected in *Voyager Passport* (See also McCardle & Chhabra, 2004).

Comprehension Assessment

Voyager Passport uses curriculum-based reading assessment as students read short grade-level passages and follow up by retelling the passage. A retell fluency measure may help to clarify for teachers the relationship of oral reading fluency and comprehension. The Retell-Fluency (RF) is the VIP fluency-based tool that may more reliably target the subset of students who exhibit a pattern where reading comprehension is inconsistent with oral reading fluency (Roberts, Good, & Corcoran, 2005). Retell Fluency is a measure administered with Reading Connected Text (RCT) during the benchmarks

***Voyager Passport* utilizes the most effective research-based comprehension instruction at all grade levels, prioritizing those skills with the largest effect size.**

and progress monitoring. Students retell in one minute as many details as they can from the RCT passage just read.

Response to Intervention

Each of the critical reading components described above figure prominently in *Voyager Passport*, which supports the recent change of providing intervention as early as possible to mitigate the consequences of students falling behind their peers. The new emphasis on Response to Intervention (RTI) models of instruction provides a system for prevention by identifying struggling readers, without IQ-achievement discrepancies. RTI provides a structure where early intervention is available to all students, including those with linguistic and cultural diversity, at risk for school failure (Brown-Chidsey & Steege, 2005; Fuchs & Fuchs, 2006; Klingner & Edwards, 2006). *Voyager Passport* helps educators match the level of instructional intensity to the needs of each student. The Voyager curricula are aligned with the Three-Tier Reading Model which originated at The University of Texas Center for Reading and Language Arts. Based on the theory that reading difficulties can be prevented, a Three-Tier Reading Model is a framework consisting of three tiers of reading instruction and intervention. Movement between the tiers is a dynamic process, with students entering and exiting intervention when assessment data indicates either an increased need or decreased need for instructional support to be a successful reader. Tier one is for all students. Tier two is for students who need additional support in a small group setting. Tier three is for students who need increased intensity. For more information on the Three-Tier Reading Model, visit www.texasreading.org/3tier/.

**The combination of read
alouds and accessible text
provides an appropriate
blended format for teaching
comprehension instruction.**

How do we predict which students will have difficulty learning to read?

Adams (1990) noted that one of the best predictors of first-grade reading ability is the fast and accurate skill of naming and recognizing letters. The ability to retrieve from memory and rapidly name colors, numbers, and objects appears to have a significant effect on later reading ability (Bowers, Sunseth, & Golden, 1999; Wolf, 1991).

Knowledge of letter-names in kindergarten correlates strongly with later reading ability (Adams, 1990; Calfee & Drum, 1986; Chall, 1967) and the lack of this knowledge is one of the first indications of probable reading difficulty. For this reason, assessments of Letter Naming Fluency (e.g., DIBELS LNF, and VIP®, LNF) are commonly used screening measures to assist in identifying students who need reading intervention support.

Phonemic awareness is one of the strong predictors of how well students will learn to read during their first two years of school (Learning First Alliance, 2000; National Reading Panel, 2000; National Research Council, 1998). Poor phonological skills hold back beginning readers (Vadasy, Sanders, & Peyton, 2006).

What are the characteristics of struggling readers?

Students who have difficulties learning to read do not easily discover the relationship between letters and their corresponding sounds, or the alphabetic code. Thus, these students exhibit considerable difficulty learning to decode and spell (Adams, 1990; Ehri, 1991; Henry, 2003). These students do not hear the individual sounds or associate these sounds with letters.

Students who struggle learning to read often do not learn the basic sight vocabulary required to read grade-level texts. Non-phonetic words like *what*, *want*, and *who* are not readily learned. Some students who have difficulty learning to read may have adequate speaking vocabularies and comprehend well when listening. These same students' reading comprehension, however, is weak often due to difficulty decoding unfamiliar words (Henry, 2003).

What other factors contribute to reading difficulties?

Learning to read builds on oral language. If that foundation is weak, reading acquisition may be slow and uncertain (Anderson, Hiebert, Scott, & Wilkinson, 1985). The language spoken in the home has a direct relationship to students' vocabulary knowledge and to later reading ability (Hart & Risley, 1995). English Language Learners whose first language differs from English, may have difficulty with learning English vocabulary for both speaking and reading (National Council of Teachers of English, 2006).

The home environment and readiness for school also has an effect on learning to read. Vellutino, Scanlon, and Jaccard (2004) reported that almost all of the poor readers in their kindergarten sample had deficiencies in home and pre-school literacy experiences such as letter-name knowledge and phonemic awareness.

Voyager Passport optimizes learning time and ensures student success by adhering to an effective model of instruction based on sound principles of instruction.

Conclusion

The National Reading Panel (2000) concluded that most students benefit from explicit, systematic instruction in phonemic awareness, phonics, fluency, vocabulary and comprehension to ensure that the highest percentage of students succeed in reading. *Voyager Passport* optimizes learning time and ensures student success by adhering to an effective model of instruction based on sound principles of instruction including: teach, model, and probe; guided practice; independent practice; cumulative review; and assessment.

Voyager Passport is also appropriate for students with IEPs who are receiving special education. Teachers follow a three-step process of preliminary placement to gather and assign instructional levels, forming instructional small groups based on student data and instructional needs, and confirming placement using instructional-level assessment.

Professional development is provided through “user-friendly” material allowing teachers to implement the curriculum without difficulty. As teachers and students become engaged in the program, they will welcome the thoughtful and succinct presentation of the intervention strategies and related activities. It will be important for teachers to understand the reading instruction terminology and corresponding spelling rules.

The inclusion of both narrative and expository text makes *Voyager Passport* unique among most series. The colorful illustrations as well as use of photography enhance the student books. Students will also enjoy the Word Works, Home Connection, and Activity Centers activities. *Voyager Passport*'s flexible instructional model accommodates diverse learners and allows teachers to adapt instruction depending on the needs of the students, ensuring success for all students.

More information about Vital Indicators of Progress is available at:
www.voyagerlearning.com.

Sample lessons of *Voyager Passport* are available at www.voyagerlearning.com.
Click on the *Voyager Passport* box, and then choose Lesson Samplers.

For more information on the curriculum, contact:

Julia Peyton, Ph.D.
Vice President of Research and Development
Voyager Expanded Learning
Ph: 214.932.9414
jpeyton@voyagerlearning.com

Peggy Marrin, M.A.
Vice President of Reading Development
Voyager Expanded Learning
Ph: 214.932.3233
pmarrin@voyagerlearning.com

Janet Macpherson, Ph.D.
Program Research Analyst
Voyager Expanded Learning
Ph: 214.932.9513
jmacpherson@voyagerlearning.com

REFERENCES

- Adams, M.J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: The MIT Press.
- Adams, M.J., Foorman, B.R., Lundberg, I., & Beeler, T. (1998). *Phonemic awareness in young children: A classroom curriculum*. Baltimore: Paul H. Brookes Publishing Co.
- Anderson, R., Hiebert, E., Scott, J., & Wilkinson, I. (Eds.). (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: National Institute of Education.
- Ball, E.W. (1993). Phonological awareness: What's important and to whom? *Reading and Writing*, 5(2), 141-160.
- Beck, I.L., McKeown, M.G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: The Guilford Press.
- Blachman, B.A. (2000). Phonological awareness. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (pp. 483-502). Mahwah, NJ: Lawrence Erlbaum.
- Bowers, P.G., Sunseth, K., & Golden, J. (1999). The route between rapid naming and reading progress. *Scientific Studies of Reading*, 3(1), 31-53.
- Bowey, J.A., & Underwood, N. (1996). Further evidence that orthographic rime usage in nonword reading increases with word-level reading proficiency. *Journal of Experimental Child Psychology*, 63(3), 526-562.
- Bradley, L., & Bryant, P.E. (1985). Rhyme and reason in reading and spelling. *International Academy for Reading in Learning Disabilities, Monograph Series*, 1, 75-95. Ann Arbor: University of Michigan Press.
- Brady, S. (in press). Phonological awareness. In P.C. Hogan (Ed.), *Cambridge Encyclopedia of the Language Sciences*. Cambridge: Cambridge University Press.
- Brett, A., Rothlein, L., & Hurley, M. (1996). Vocabulary acquisition from listening to stories and explanations of target words. *Elementary School Journal*, 96, 415-422.
- Brown-Chidsey, R., & Steege, M.W. (2005). *Response to intervention: Principles and strategies for effective practice*. New York: Guilford.
- Calfee, R.C., & Drum, P. (1986). Research on teaching reading. In M.C. Wittrock (Ed.), *Handbook of research on teaching, 3rd Ed.* (pp. 804-849). New York: Macmillan.
- Carlisle, J.F., & Rice, M.S. (2002). *Improving reading comprehension: Research-based principles and practices*. Baltimore: York Press.
- Chall, J.S. (1967). *Learning to read: The great debate*. New York: McGraw-Hill.
- Chambliss, M.J., & Calfee, R.C. (1998). *Textbooks for learning: Nurturing children's minds*. Malden, MA: Blackwell Publishers.
- Chard, D.J., Vaughn, S., & Tyler, B.J. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities*, 35, 386-406.
- Christensen, C.A., & Bowey, J.A. (2005). The efficacy of orthographic rime, grapheme-phoneme correspondence, and implicit phonics approaches to teaching decoding skills. *Scientific Studies of Reading*, 9(4), 327-349.
- Coyne, M.D., Kame'enui, E.J., & Simmons, D.C. (2001). Prevention and intervention in beginning reading: Two complex systems. *Learning Disabilities Research and Practice*, 16, 62-73.
- Cunningham, A.E. (1990). Explicit versus implicit instruction in phonemic awareness. *Journal of Experimental Child Psychology*, 50, 429-444.
- Deno, S. L. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children*, 52(3), 219-232.
- Ehri, L.C. (1991). Development of the ability to read words. In R. Barr, M. Kamil, P. Mosenthal, & P. Pearson (Eds.), *Handbook of reading research Volume II* (pp. 383-417). New York: Longman.
- Ehri, L.C. (2004). Teaching phonemic awareness and phonics: An explanation of the National Reading Panel meta-analyses. In P. McCardle & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 153-186). Baltimore: Paul H. Brookes Publishing Co.
- Ehri, L.C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of reading*, 9(2), 167-188.
- Ehri, L. C., & Robbins, C. (1992). Beginners need some decoding skill to read words by analogy. *Reading Research Quarterly*, 27(1), 12-26.
- Fuchs, D., & Fuchs, L. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41 (1), 93-99.
- Good, R.H., Baker, S.K., & Peyton, J.A. (in press). Making sense of nonsense word fluency: Determining adequate progress in early first grade reading. *Reading and Writing Quarterly*.
- Good, R. H., Gruba, J., & Kaminski, R. A. (2001). Best practices in using Dynamic Indicators of Basic Early Literacy Skills (DIBELS) in an outcomes-driven model. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV* (pp. 679-700). Washington, DC: National Association of School Psychologist.
- Good, R., Simmons, D., & Kame'enui, E. (2001). The importance and decision-making utility of a continuum of fluency-based indicators of foundational reading skills for third-grade highstakes outcomes. *Scientific Studies of Reading*, 5 (3), 257-288.
- Goswami, U. (1986). Children's use of analogy in learning to read: A developmental study. *Journal of Experimental Child Psychology*, 42, 73-83.
- Goswami, U., & Bryant, P. (1990). *Phonological skills and learning to read*. Hove, UK: Lawrence Erlbaum Associates, Inc.

- Grant, J., Elias, G., & Broerse, J. (1989). An application of Palinscar and Brown's comprehension instruction paradigm to listening. *Contemporary Educational Psychology*, 14, 164-172.
- Graves, M.F. (2004). Teaching prefixes: As good as it gets? . In J.F. Baumann & E.J. Kame'enui (Eds.), *Vocabulary instruction: Research to practice* (pp. 81-99). New York: The Guilford Press.
- Graves, M. E. (2006). *The vocabulary book: Learning and instruction*. New York: Teachers College, Columbia University.
- Hart, B., & Risley, T.R. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore: Paul H. Brookes Publishing Co.
- Hatcher, P.J., Hulme, C., & Ellis, A.W. (1994). Ameliorating early reading failure by integrating the teaching of reading and phonological skills: The phonological linkage hypothesis. *Child Development*, 65, 41-57.
- Henry, M.K. (1988). Beyond phonics: Integrated decoding and spelling instruction based on word origin and structure. *Annals of Dyslexia*, 38, 259-275.
- Henry, M. K. (2003). *Unlocking literacy: Effective decoding and spelling instruction*. Baltimore: Paul H. Brookes Publishing Co.
- Henry, M. K. (2006, Fall). Becoming word-wise: Areas for vocabulary instruction. *The International Dyslexia Association, Dallas Branch, Newsletter*, 1-4.
- Homan, S.P., Klesius, J.P., & Hite, C. (1993). Effects of repeated readings and nonrepetitive strategies on students' fluency and comprehension. *Journal of Educational Research*, 87, 94-100.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80, 437-447.
- Kame'enui, E.J., & Baumann, J.F. (2004). Vocabulary: The plot of the reading story. In J.F. Baumann & E.J. Kame'enui (Eds.), *Vocabulary instruction: Research to practice* (pp. 3-12). New York: The Guilford Press.
- Kaminski, R. A., & Good, R. H., III (1996). Toward a technology for assessing basic early literacy skills. *School Psychology Review*, 25 (2), 215-227.
- Klingner, J.K., & Edwards, P.A. (2006). Cultural considerations with response to intervention models. *Reading Research Quarterly*, 41 (1), 108-117.
- Kuhn, M.R., Swanenflugel, P.J., Morris, R.D., Morrow, L.M., Woo, D., Meisinger, B., Sevcik, R., Bradley, B., & Stahl, S.A. (in memoriam), (2006). Teaching children to become fluent and automatic readers. *Journal of Literacy Research*, 38, 357-387.
- Learning First Alliance. (2000). *Every child reading: A professional development guide*. Retrieved on January 2, 2008 from <http://www.learningfirst.org/publications/reading/>
- Liberman, I.Y. (1973). Segmentation of the spoken word and reading acquisition. *Bulletin of the Orton Society*, 23, 65-77.
- Linan-Thompson, S., & Vaughn, S. (2007). *Research-based methods of reading instruction for English language learners: Grades K-4*. Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Mathes, P.G., Denton, C.A., Fletcher, J.M., Anthony, J.L., Francis, D.J., Schatschneider, C. (2005). The effects of theoretically different instruction and student characteristics on the skills of struggling readers. *Reading Research Quarterly*, 40 (2). 148-183.
- McCardle, P., & Chhabra, V. (2004). *The voice of evidence in reading research*. Baltimore: Paul H. Brookes Publishing Co.
- McKeown, M.G., & Beck, I.L. (2004). Direct and rich vocabulary instruction. In J.F. Baumann & E.J. Kame'enui (Eds.), *Vocabulary instruction: Research to practice* (pp. 13-27). New York: The Guilford Press.
- Moats, L.C. (2000). *Speech to print: Language essentials for teachers*. Baltimore: Paul H. Brookes Publishing Co.
- Moats, L. C. (2005a). *Language essentials for teachers of reading and spelling: Module 5 Getting up to speed: Developing fluency*. Boston: Sopris West Educational Services.
- Moats, L. C. (2005b). *Language essentials for teachers of reading and spelling: Module 6 Digging for meaning: Teaching text comprehension*. Boston: Sopris West Educational Services.
- Mraz, M., Padak, N.D., & Rasinski, T.V. (2007). *Evidence-based instruction in phonemic awareness: A professional development guide to phonemic awareness*. New York: Pearson Allyn & Bacon.
- Nagy, W. (2007). Metalinguistic awareness and the vocabulary-comprehension connection. In R.K. Wagner, A.E. Muse, and K.R. Tannenbaum (Eds.), *Vocabulary acquisition: Implications for reading comprehension* (pp. 52-77). New York: The Guilford Press.
- National Council of Teachers of English. (2006). NCTE position paper on the role of English teachers in educating English language learners (ELLs). (<http://www.ncte.org/about/over/positions/category/div/124545.htm>)
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction (NIH Publication No. 00-4754)*. Washington, DC: U.S. Government Printing Office.
- National Research Council. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- O'Connor, R., Jenkins, J., & Slocum, T. (1995). Transfer among phonological tasks in kindergarten: Essential instructional content. *Journal of Educational Psychology*, 2, 202-217.
- Pearson, P.D., Hiebert, E.H., & Kamil, M.L. (2007). Vocabulary assessment: What we know and what we need to learn. *Reading Research Quarterly*, 42 (2), 282-297.
- Pressley, M., & Wharton-McDonald, R. (1997). Skilled comprehension and its development through instruction. *School Psychology Review*, 26, 448-466.

- Rasinski, T.V. (2006). Fluency: An oft-neglected goal of the reading program. In C. Cummins (Ed.), *Understanding and Implementing Reading First Initiatives: The role of administrators* (pp. 60-71). Newark, DE: International Reading Association.
- Reyna, V.F. (2004). Why scientific research? The importance of evidence in changing educational practice. In P. McCardle & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 47-58). Baltimore: Paul H. Brookes Publishing Co.
- Robbins, C., & Ehri, L.C. (1994). Reading storybooks to kindergartners helps them learn new vocabulary words. *Journal of Educational Psychology*, 86, 54-64.
- Roberts, G., Good, R., & Corcoran, S. (2005). Story retell: A fluency-based indicator of reading comprehension. *School Psychology Quarterly*, 20 (3), 304-317.
- Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research*, 66, 181-221.
- Shankweiler, D., & Liberman, I.Y. (1972). Misreading: a search for causes. In J.F. Kavanagh & I.G. Mattingly (Eds.), *Language by ear and by eye: The relationships between speech and reading* (pp. 293-318). Cambridge, MA: The MIT Press.
- Shaywitz, S. (2003). *Overcoming dyslexia*. New York: Alfred A. Knopf.
- Snow, C.E., Burns, M.S., & Griffin, P. (1998). (Eds.). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Snow, C.E., & Sweet, A.P. (2003). Reading for comprehension. In A.P. Sweet & C.E. Snow (Eds.), *Rethinking reading comprehension* (pp. 1-11). New York: The Guilford Press.
- Stanovich, K.E. (2000). *Progress in understanding reading: Scientific foundations and new frontiers*. New York: The Guilford Press.
- Tangel, D.M., & Blachman, B. (1995). Effect of phoneme awareness instruction on the invented spelling of first-grade children: A one-year follow-up. *Journal of Reading Behavior*, 27, 153-185.
- Torgesen, J. K. (2004). Lessons learned from research on interventions for students who have difficulty learning to read. In P. McCardle & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 355-382). Baltimore: Paul H. Brookes Publishing Co.
- Torgesen, J., Morgan, S., & Davis, C. (1992). Effects of two types of phonological awareness training on word learning in kindergarten children. *Journal of Educational Psychology*, 84, 364-370.
- Vadasy, P.F., Sanders, E.A., & Peyton, J.A. (2006). Code-oriented instruction for kindergarten students at risk for reading difficulties: A randomized field trial with paraeducator implementers. *Journal of Educational Psychology*, 98(3), 508-528.
- Vaughn, S., & Linan-Thompson, S. (2003). Group size & time allotted to intervention: Effects for students with reading difficulties. In B. Foorman (Ed.), *Preventing and remediating reading difficulties: Bringing science to scale*, (pp. 299-324). Baltimore: York Press.
- Vellutino, F.R., Scanlon, D.M., & Jaccard, J. (2004). Toward distinguishing between cognitive and experiential deficits as primary sources of difficulty in learning to read: A two year follow-up of difficult to remediate and readily remediated poor readers. In B. Foorman (Ed.), *Preventing and remediating reading difficulties: Bringing science to scale*, (pp. 73-120). Baltimore: York Press.
- Wolf, M. (1991). Naming speed and reading: the contribution of the cognitive sciences. *Reading Research Quarterly*, 26(2), 123-141.
- Wolf, M. (Ed.) (2001). *Dyslexia, Fluency, and the Brain*. Timonium, MD: York Press.
- Wolf, M. (2007). *Proust and the squid: The story and science of the reading brain*. New York: Harper.
- Wolf, M., & Katzner-Cohen, T. (2001). Reading fluency & its intervention. *Scientific Studies in Reading*, 5 (3), 211-239.
- Wolfe, P., & Nevills, P. (2004). *Building the reading brain, preK-3*. Thousand Oaks, CA: Corwin Press.

Research Foundations of *Voyager Passport*TM

Marcia K. Henry, Ph.D. and Julia Peyton, Ph.D.





One Hickory Centre
1800 Valley View Lane, Suite 400
Dallas, Texas 75234
800.399.1995
www.voyagerlearning.com