**Reading Horizons v5 Research Rationale**

**Introduction**  
*Reading Horizons v5* is a revolutionary, explicit, systematic phonics program based on the *Discover Intensive Phonics for Yourself* method. It is delivered via software and/or direct instruction, with accompanying materials.

**Background**  
The challenge in developing the *Reading Horizons v5* software and materials was to create effective software and direct-instruction materials that meet the needs of a wide range of individual students, teachers, and institutions. For this reason, the need to develop software and materials that are supported by research is apparent.

In addition, the development of *Reading Horizons v5* included a complete revamping of the original software and direct-instruction materials. The challenge was to do so without compromising the integrity of the *Reading Horizons* program.

**Research Rationale**  
Ongoing current and recursive research guides the development of cutting-edge educational technology and curriculum, such as the *Reading Horizons v5* software and direct-instruction materials.

This document presents research that validates the development of the new *Reading Horizons v5* software and direct-instruction materials. While the research cited is not comprehensive, a particular reference has been selected to represent each area discussed. Rather than going into depth in only a few areas, the amount of research shared per topic is limited to allow for the presentation of a wider range and variety of topics.

We at Reading Horizons believe in the importance of research to guide and validate our curriculum and development decisions. *Reading Horizons v5* was developed with current research in mind to provide appropriate, accurate, and contemporary rationale to support and validate its development.
Five Pillars of Reading Instruction
The following overview demonstrates how the National Reading Panel’s instructional recommendations have been incorporated into the scope and sequence of Reading Horizons products.

1. Phonemic Awareness: The ability to notice, think about, and work with the individual sounds in spoken words.

Current research indicates phonemic awareness is the strongest predictor of reading success, even at the high school level. Training in phoneme identification, manipulation, and substitution is essential for early grades and is indispensable in deterring dyslexic tendencies. The basic fundamentals employed can easily be applied to older students.

Phonemic awareness, not intelligence, best predicts reading success.

Reading Horizons provides detailed lesson plans and assessment materials for teaching and assessing a student’s ability to identify initial, medial, and final sounds; rhyme; individual sounds within words; number of syllables in words; and number of words within sentences. Additional activities address manipulation and substitution of phonemes.

2. Phonics Instruction: Instruction in the ability to draw relationships between the letters (graphemes) of written language and the individual sounds (phonemes) of spoken language. This teaches students to use these relationships to read and write words.

Reading Horizons teaches students letter/sound associations through multisensory direct instruction and highly interactive student participation. A unique marking system is employed in the program, helping students examine and scrutinize the internal structure of words and identify their likely and unlikely patterns.

Students receive systematic instruction in identifying blends, the 42 sounds of the alphabet, and the phonetic patterns used to form English words. They are simultaneously immersed in language development, sentence structure, spelling, and handwriting skills. As students move through this logical sequence of information, each step provides constant, positive reinforcement of previously learned skills. As Sally Shaywitz—member of the National Reading Panel—wrote in her book Overcoming Dyslexia, “Letters linked to phonemes are no longer meaningless marks on paper, but like Cinderella, have been transformed into something truly spectacular—language! Decoded into phonemes, words are
processed automatically by the language system. The reading code is deciphered!"¹

3. Fluency Instruction: Instruction in the ability to read text accurately and quickly, either silently or orally.

Neuroscientists are learning more about how fluency is developed. Fluent reading is established after the individual reads the word at least four times, using accurate phonologic processing (slow, accurate sounding out). Fluency is built word by word and is entirely dependent on repeated, accurate sounding out of the specific word. Fluency is not established by “memorizing” what words look like but rather by developing correct neural-phonologic models of the word. We now know fluency is not the apparent visual recognition of an entire word but rather the retrieval of the exact neural model, created by proper repeated phonologic processing.

*Reading Horizons* teaches accurate phonologic processing and then offers repetition and guided practice. Early in the course, the program takes great care to develop fluency. This is accomplished through the use of the slide: a blending process in which students are taught to pronounce words smoothly, left to right. In *Reading Horizons v5*, a library of over 225 leveled reading passages is used to further develop fluency. The students are given the option for word study, repeated practice, and guided reading within those passages. This process, coupled with the repeated practice of phonological processing, is the key to fluency.

4. Vocabulary Instruction: Instruction in the words necessary for effective communication.

A knowledge of word meaning helps with decoding and also improves reading comprehension. Therefore, *Reading Horizons* incorporates vocabulary development immediately following the introduction of the first letter set. As new words are introduced, students simultaneously learn each word’s meaning and usage.

*Reading Horizons v5* contains a vocabulary tool that may be accessed at any time and includes vocabulary relating to the skills that are being learned by the student. Students are able to hear words pronounced, defined, and used in sentences. There are illustrations for words, where applicable, and students are able to phonetically decode each word, as well as pronounce and record it in order to compare their pronunciation with the narrator’s. This database of over 10,000 words is available as a resource for students to search for words to help with building their vocabulary and to improve their reading comprehension.

5. Comprehension Instruction: Instruction in the ability to understand, to remember, and to communicate meaning from what is read.
Comprehension is accomplished only when the student has moved past the word level and has a strong vocabulary. If decoding is not an automatic process, comprehension will suffer. *Reading Horizons* addresses comprehension in several ways: First, the systematic, explicit, multi-sensory phonics instruction helps create neural pathways to make the decoding process automatic; second, every word is used in a context sentence, and vocabulary is built throughout the program; and finally, the library component offers comprehension questions, which assess necessary comprehension skills and guided practice to ensure proper application of comprehension strategies.

**Contents**
The following topics are addressed in this document:

- Using technology (p. 5)
- Teaching phonics (p. 7)
- Competency-based instruction (p. 8)
- The role of motivation (p. 9)
- Progress assessments (p. 11)
- Teaching sight words (p. 14)
- Teaching vocabulary (p. 15)
- Teaching reading comprehension (p. 20)
- Teaching pronunciation (p. 23)
- Teaching reading to English Language Learners (ELLs) (p. 25)

As each point is discussed, research that supports each topic is provided, followed by examples of how *Reading Horizons v5* adheres to the research rationale.
Technology

What the Research Says about Using Technology:
- To teach reading
- To teach vocabulary
- To enhance reading comprehension
- To promote self-directed learning

What the Research Says about Using Technology to Teach Reading:
“As an alternative or adjunct to traditional reading instruction, computer-assisted instruction can offer students the opportunity to receive customized support, learn at a comfortable pace, and encourage the active processing of text. Prior research with adolescents suggests that computer-assisted reading instruction can facilitate reading comprehension. Reinking (1988) found that fifth and sixth graders reading expository texts benefited from reading computer-mediated texts that included options for additional information about the text, such as vocabulary definitions, simplified text, and background information.”

What the Research Says about Using Technology to Teach Vocabulary:
“Computer technology can be used to help teach vocabulary: The National Reading Panel (NRP) finding that the use of computers was successful in improving vocabulary learning applied mostly to younger children. However, the effects of computers on various aspects of literacy can also be demonstrated for adolescent populations.”

What the Research Says about Using Technology to Enhance Reading Comprehension:
“In a study with low-achieving fifth-grade students receiving traditional versus computer-assisted instruction, Weller, Carpenter, and Holmes (1998) found significant increases in standardized reading comprehension scores with the computer-assisted group. Weller et al credited the augmented learning outcomes to the daily interaction that the students had with computer-assisted instruction. Similarly, Boyd (2000) found that a self-paced, computer-based reading instruction helped to increase seventh- and eighth-grade students’ independent reading levels.”

What the Research Says about Using Technology to Promote Self-Directed Learning:
“The use of hypermedia, where learners have the ability to access different nodes or levels of information in a non-linear fashion, displays encouraging effects in facilitating a self-directed learning experience. Yang (1996) believes that hypermedia is a promising tool in an educational environment, as it allows learners to take control of their own learning, provides users with almost full control over the learning situation, and allows the learners to guide their own learning. While it should be addressed that some software programs are very controlled and do not allow for such a capability to self-direct the learning process, the potential of CALL to facilitate self-directed learning is emphasized.”

A comprehensive, qualitative study conducted by Zheng (1998) shows the significance of using technology beyond simply assisting in the learning process.
Computers were a medium which “brought learners’ potential to full play by cultivating their critical and analytical thinking, activating their interest and motivation in academic learning, and above all, by enhancing their metacognitive abilities that empowered them to be more creative and constructive learners.” An educational technology learning environment facilitated self-directed learning.
Phonics

What the Research Says about Teaching Phonics:
“While the focus of much concern in adolescent literacy is on comprehension, at least 10 percent of adolescents still have difficulties with word analysis and related skills. Therefore, policies should encourage the careful assessment of reading skills to be certain that individualized instruction is provided to each student.”

Summary: Phonics Instruction Tips in a Nutshell (from the National Institute for Literacy [NIFL])
- Assess phonics skills of adult beginning and (some) intermediate-level readers.
- Provide explicit, systematic phonics instruction that is matched to the assessed needs of learners.
- Follow a defined scope and sequence of skills or adopt a structured phonics-based program.
- Provide practice of the phonics elements you have taught, including (perhaps) use of controlled-vocabulary texts.
- Do not make decoding skills the entire focus of the reading lesson. In each lesson, address the other needed component skills as well, and provide opportunities for learners to gain access to adult-interest reading materials.

How Reading Horizons v5 Addresses Teaching Phonics:

Reading Horizons software and direct-instruction materials provide explicit, systematic phonics instruction with a defined scope and sequence. The Teacher’s Manuals provide multiple opportunities for student involvement in the lessons, as well as enrichment activities that incorporate other important aspects of a reading lesson, such as grammar, spelling, and guided reading. An additional convenience that has been added to the manuals is the correlation of the lesson numbers in the manuals with the lesson numbers in the software; review sections to provide additional practice of learned skills before introducing new skills that build on those already learned; and a student workbook, which provides students with supplementary take-home practice.

Additional elements in the bulleted list above will be discussed throughout this document to demonstrate that each of the above points has been addressed in the Reading Horizons software and materials.
Competency-based Instruction

What the Research Says about Competency-based Instruction:
In the Report of the National Literacy Panel on Language-Minority Children and Youth, Shanahan and Beck illustrate in their research the need for competency-based instruction. Simply put, their research suggests that “the need for differential instruction ... is apparent.”

Furthermore, Liou (2000) invokes the need to design software that is personalized to learners’ needs.

How Reading Horizons v5 Addresses Competency-based Instruction:
To this end, the Reading Horizons v5 software employs a competency-based curriculum. When setting up students in the Administration System, teachers can set students’ current levels (Emerging, Basic, or Accelerated) in the “Student Entry Level” section to ensure that students are starting at an appropriate place in the program. Teachers can also customize student options to address a variety of needs.

Then, on the students’ screen, lessons are overridden based on the teacher’s input of students’ entry level.

When students complete a lesson, the review screen displays students’ scores for each section of the lesson. Students must master the skills in each lesson before moving on to more-advanced skills. This ensures student mastery of the material.
Motivation
What the Research Says about the Role of Motivation:
“Motivation and engagement are critical for adolescent readers. If students are not motivated to read, research shows that they will simply not benefit from reading instruction. As much of the work in motivation and engagement shows, these are critical issues that must be addressed for successful interventions. In fact, motivation assumes an important role in any attempt to improve literacy for students of all ages, not just adolescents.”

How *Reading Horizons v5* Addresses the Role of Motivation

*Reading Horizons v5* software provides several components that contribute to maintaining students’ engagement and motivation, such as presenting a variety of activities from which students can self-select according to interest (such as those found in the Most Common Words lessons) ...

... self-directed options (such as switching between the female and male narrators’ voices and changing the background color at any time),

... presenting competency-based lessons (as discussed previously on p. 8) ...
... providing students with an opportunity to “test out” of skills they already know,

... utilizing age-appropriate reading topics,

... providing relevant topics that allow students to practice transferring learned skills,

... and providing engaging graphics (such as the 3D rooms in the phonemic awareness activities).
Assessments

What the Research Says about Assessments:

Some points to consider when deciding appropriate types of assessments to employ include:

- Placement tests: Ensure students’ skills are assessed so that you may know the appropriate level of instruction.
- Interim testing: Using interim tests is vital.
- Reading-level assessments: Cloze exercises are an effective approach to assess comprehension.

We know that assessing students is important, and assessing students in a variety of ways is, likewise, important. Let’s address the different types of assessments that Reading Horizons v5 employs.

Different Types of Assessments Employed by Reading Horizons v5:

- Placement tests
- Interim tests
- Reading-level assessments
- Informal assessments

What the Research Says about Placement Tests:

“Since the adults in ABE and family literacy classrooms often have varied skills, you will need to use assessments to identify those who need a complete, systematic phonics introduction, those who might need a brush-up and/or practice with multi-syllabic words, and those who don’t need direct phonics instruction at all.”

How Reading Horizons v5 Addresses Placement Tests:

As each student enters a lesson, he/she is provided an opportunity to “test out” of a skill by taking the “Skill Check.” Each skill check includes some form of real-life reading and context, since the objective of the program is to help students improve their ability to read level-appropriate text. After students are introduced to the skill, students are provided an option to “test out” of the skill. If they select “Skill Check,” they are taken to a sample of real-life reading and are asked to complete a variety of interactions to assess their knowledge of the skill. If they pass the skill check, they are taken to a skill summary lesson, where they will learn appropriate markings associated with that skill before moving on to the next lesson. If they fail the Skill Check, they are taken to the Full Instruction lesson, where they will learn the details of the lesson and will be provided practice with the skill. Students can also opt to simply jump to the Full Instruction rather than trying to “test out” using the Skill Check option.
What the Research Says about Interim Testing:
Using interim testing is vital. Interim tests are additional tests that are beyond pre- and post-tests. Interim testing includes administering tests intermittently or regularly during a program or semester, for example, to assess whether students are grasping the concepts and material learned.

“The more you teach without finding out who understands the information and who doesn’t, the greater the likelihood that only already-proficient students will succeed.”

How Reading Horizons v5 Addresses Interim Testing:
The interim tests used in the Reading Horizons v5 program are called “Chapter Tests.” These tests are administered at the end of each of the six chapters to ensure that students are mastering the strategies being taught to them. Skills are assessed both in isolation ...

... and in context with material that does not supersede the skills they have learned up to that point. This is done to ensure that students are retaining skills learned and then transferring these learned skills to real-life reading contexts.

If students fail any part of the Chapter Test, they are provided a review of those failed portions of the lessons before re-testing on those particular skills. Students must master the skills before moving on to the next chapter. Because the Reading Horizons methodology builds sequentially on previously learned skills, interim testing is crucial for success in the program. Chapter Tests provide a “safety net” to ensure that students appropriately master skills before moving on.
What the Research Says about Reading Level Assessments:

- It is imperative to match learners’ reading abilities with appropriate reading passages.
- Cloze tests have long been used to assess both reading comprehension and passage readability.

What the Research Says about Matching Learner’s Reading Abilities with Appropriate Reading Passages:

“Successful performance in nearly all academic areas is contingent upon students’ abilities to comprehend their assigned reading materials. ... Teachers use a variety of formal and informal assessment tools to determine students’ instructional reading levels. One such ... instrument is a passage-completion technique known as the cloze procedure.”

What the Research Says about Using Cloze Tests:

“These data were interpreted as providing... grounds for claiming that cloze tests measure ... what has commonly been labeled reading comprehension skills.”

How Reading Horizons v5 Addresses Reading-Level Assessments

The Library section on the Reading Horizons v5 software (which will be discussed further on pp. 36-37) utilizes an initial reading assessment to determine a student’s current reading level. This is done to ensure that the appropriate level of passages are made available to the student. First, a student reads three sections of a passage while being timed.

Then, the student completes a cloze test, which is a method of testing that assesses comprehension. A student is required to “fill in the blank” with a missing word. In the Reading Horizons v5 cloze test, students are provided with a drop-down multiple-choice menu, where they select the correct word to complete the sentence. The computer tracks the students’ progress and determines a composite fluency score that combines both the reading rate and comprehension score. Students continue to test with other passages until they “level off,” at which point the library is unlocked, and the passages at their appropriate levels are made available to them.
Sight Words
What the Research Says about Teaching Sight Words:

- Learning sight words is useful.
- Sight words must be rapidly, automatically recognized.
- Readers need to recognize as many words as possible by sight. Because of real and immediate needs, some words have to be learned by sight initially.

“The time-honored sight words approach is still useful. You will need to teach the common, high frequency words (many of which are phonetically irregular) as sight words, because these must be rapidly, automatically recognized. Beginners also may need to learn other important words by sight because they are too long or too complex or too phonetically irregular to decode with their present level of skill.

“The concern in teaching words by sight is that adults who have struggled with reading have often relied too much on their sight memories and you don’t want to reinforce what may have become a bad habit of ‘guessing’ based on the appearance of a word. Instead you want to help them build more efficient decoding strategies, using phonic and other clues.

“But remember that the eventual goal of teaching word identification skills is to enable accurate, rapid word reading, which facilitates more reading and increased exposure to words, which in turn leads to storing those words in memory as ‘sight vocabulary.’ In other words, we want each reader to come to recognize as many words as possible by sight. Because of real and immediate needs, some words have to be learned that way initially.”

How Reading Horizons v5 Addresses Teaching Sight Words:

In Reading Horizons v5, the Most Common Words lessons are divided into three objectives: 1) phoneme/grapheme recognition (spelling and pronouncing); 2) reading in context; and 3) rapid recognition. Each objective contains three different activities from which students can choose to practice each objective. Students are provided with a variety of activities that they can self-select, depending on their interests, to help maintain interest and motivation.
**Vocabulary**

**What the Research Says about Teaching Vocabulary:**
- Explicitly teach vocabulary.
- Provide repetition and practice of new vocabulary.
- The use of pictures and context sentences is effective.
- Provide access to word definitions while engaged in a reading task.

**What the Research Says about Explicitly Teaching Vocabulary:**
“The [National Reading Panel] review showed that while learning from context is important, direct instruction of vocabulary is effective in improving both vocabulary and comprehension. The implication is that *both* direct, explicit instruction *and* learning from context are important. A further implication is that explicit instruction *may* be useful in closing the gap between the students with the highest levels of vocabulary knowledge and those with the lowest.”¹⁷

“Learners need an explicit introduction to vocabulary, accurate and effective support in interpreting new vocabulary, and practice for remembering vocabulary.”¹⁸

**How Reading Horizons v5 Addresses Explicitly Teaching Vocabulary:**
Words are never taught without an option to learn the meaning of the word and to see it in context. They can also learn vocabulary, using the vocabulary tab on the *Reading Horizons v5* software.

In the vocabulary tab of the software, students select a skill. They are then given the opportunity to self-select the vocabulary words they would like to study. Words are grouped by high-frequency words, additional lower-frequency words, nonsense words, and the English for Specific Purposes (ESP) database words, which include school, business, medical, hospitality, and travel vocabulary. Students then click on the word they want to practice, at which
point students are asked to decode the word. Then students hear and see the
definition, hear and see a context sentence, and view a graphic (where applicable).

**What the Research Says about Providing Repetition and Practice of New Vocabulary:**
“Spaced repetition of vocabulary, occurring either through multiple exposures
during reading or listening (serving as a type of repetition) or through explicit
teaching, must additionally receive overt learner attention through simultaneous
or follow-up vocabulary tasks supported by strategy instruction.”

“Research suggests that the more types of help that students use (e.g., verbal help
and imagery rather than verbal help alone) the better for their vocabulary
acquisition (Yoshii & Flaitz, 2001). In short, more interaction is better for
learning words.”

**How Reading Horizons v5 Addresses Providing Repetition and Practice of New
Vocabulary:**
In *Reading Horizons v5*, students are provided with multiple opportunities
and interactions within the lessons, in the vocabulary section, and in the
library to practice vocabulary. It is important to provide students with
multiple practice opportunities to ensure that students are mastering the
concepts learned, as well as to provide variety, while simultaneously
increasing their vocabulary.

In *Reading Horizons v5*, students access the vocabulary tab on the software, or
they click on the vocabulary button next to a word in a lesson that they want to learn.

Students mark the word, see and hear the definition and context sentence, and
see an accompanying graphic (where applicable).
Native-language translations are provided for non-native English speakers, if desired.

In the Library section, students have the option to learn the meanings of “challenge words” before reading a reading passage. This will be discussed further on p. 21.

What the Research Says about Using Pictures and Context Sentences when Teaching New Vocabulary:

“If pictures and definitions were provided by glosses, incidental learning with multimedia annotations yielded 25 per cent accuracy on production tests and 77 per cent on recognition tests.”\textsuperscript{21}

“Students remembered word translation and recalled the passage better when they had selected both written and pictorial annotations while listening rather than one of these types or no annotations.”\textsuperscript{22}
How Reading Horizons v5 Addresses Using Pictures and Context Sentences when Teaching New Vocabulary:

In the vocabulary section of the software, students mark the word, see and hear the definition and context sentence, and see an accompanying graphic (where applicable).

Students can also click on the graphic to enlarge the picture.

What the Research Says about Providing Access to Word Definitions While Engaged in a Reading Task:

“A number of studies have found that learners who have access to word definitions while they are reading or listening on the computer are able to remember word meanings. Such activities provide an ideal means of teaching vocabulary in context, rather than having students guess meaning from context. Research suggests that the more types of help that students use (e.g., verbal help and imagery rather than verbal help alone) the better for their vocabulary acquisition (Yoshii & Flaitz, 2001). In short, more interaction is better for learning words, and CALL [Computer-Assisted Language Learning] provides some useful types of interactions by offering learners a variety of help.”23
How Reading Horizons v5 Provides Access to Word Definitions While Engaged in a Reading Task:

Words are never taught without an option to learn the meaning of the word and to see it in context. We’ve seen this screen shot before.

Also, in the Library section of the software, students can click on any word in the passage and have it take them to the vocabulary section to learn the definition and context sentence of the word.
Reading Comprehension

What the Research Says about Teaching Reading Comprehension:
- Provide level-appropriate readings.
- Provide students opportunities to self-select what they read, according to their interests.
- Provide adult-interest reading materials.
- Provide opportunities for students to have passages read aloud to them.
- Use pre-reading comprehension and word-learning strategies to prepare students to read effectively.

The Library is a brand new fluency and reading comprehension component of the Reading Horizons software. The Library provides students with opportunities to practice transferring skills learned in the Reading Horizons lessons to “real-life” reading, using high-interest, low-readability text. In addition, the Library provides opportunities to build fluency and comprehension by assessing reading rate and reading comprehension. A composite reading fluency score is awarded as each passage is read, which is a revolutionary approach to assessing fluency while using technology.

What the Research Says about Providing Level-Appropriate Readings:
“To the extent that it is possible, choose readings that contain only a limited number of new words. Readings should be considered comprehensible input, that is, just slightly above the student’s true reading level at present.”

What the Research Says about Providing Students with Opportunities to Self-Select What They Read According to Their Interests:
“Provide ample opportunities for students to read on their own for pleasure outside of class. They will be more motivated if they can select fiction or nonfiction on topics they are interested in.”

What the Research Says about Providing Adult-Interest Reading Materials:
“Encourage and enable all adults in the program to read meaningful stories and articles that appeal to their interests. Remember that the components skills reinforce each other; they don’t develop in a strictly linear fashion. You don’t have to put off ‘real reading’ until the learners have all the background skills. In fact they may learn new word meanings through exposure to more difficult material.”
How Reading Horizons v5 Provides Adult-Interest Reading Materials:

After taking the initial reading-level assessment, appropriate-level passages are unlocked for the students, from which they can choose to read. Students select a genre that interests them. Genres include Animals, Culture, Earth Science, Fact or Fiction, Famous Firsts, Famous People, Famous Places, Health, Nature’s Mysteries, Overcoming Obstacles, Space, Sports, Sports Heroes, Technology, and World Leaders. Students select from over 225 non-fiction passages, according to what interests them. Passages are categorized according to the student’s current reading level as bronze, silver, and gold passages. Bronze passages are passages that are below a student’s reading level and are worth one point. Silver passages are at the student’s reading level, and they are worth two points. Gold passages are one level above the student’s current reading level, and they are worth three points. This point system was designed to motivate students to read passages that challenge them while still allowing students the opportunity to read lower-level passages that are of interest to them. Students must earn a certain number of points within each chapter before they progress to the next group of lessons in the next chapter. (The default is 20 points.)

What the Research Says about Using Pre-Reading Comprehension and Word Learning Strategies to Prepare Students to Read Effectively:
Continue using the top-down, schema-activating, pre-reading comprehension, and word learning strategies to prepare students to read effectively.

How Reading Horizons v5 Addresses Using Pre-Reading Comprehension and Word Learning Strategies to Prepare Students to Read Effectively:

Students have an opportunity to look at pictures that illustrate the topic they are going to read about and to preview vocabulary before reading each passage. Challenge words are words that are found in the passage that supersede the skills they have learned up to that point in the Reading Horizons program. Students can choose to either click on the sound icon next to each word to hear the word pronounced, or students can choose to see the word marked, see and hear a definition and context sentence, and see a graphic (where applicable). Passage terms are proper nouns that students can elect to hear pronounced before they read the passage. Students can
also look at the pictures that illustrate the reading passage before they read to generate ideas about what they are going to read.

**What the Research Says about Hearing a Passage Read Aloud:**
“Reading to adults and using taped readings or computer-based text readers are ‘bypass’ strategies to enable individuals to access important written material when they need it. The focus on reading instruction does not preclude other such options for meeting the immediate needs of adults and families and providing appropriate accommodations for adults with disabilities.”

**How Reading Horizons v5 Addresses Hearing a Passage Read Aloud:**

Students can click on the **Listen** button to hear the passage read to them. This helps them practice moving their eyes across the screen as they hear the narrator read the passage fluently to them. In addition, it allows students to hear the sentence stress and intonation of the text in the passage. This is especially helpful for English Language Learners.
Pronunciation

What the Research Says about Teaching Pronunciation:

- “The more pronounceable a word is, the more easily it is learned.”
- Some students are able to accurately mimic the pronunciation of native-English speakers. Other students need to be explicitly taught how to articulate sounds and words.
- Self-monitoring is a crucial strategy to master for students who want to improve their pronunciation. Self-monitoring is being able to monitor your own pronunciation, determine what needs to be fixed, and make the necessary adjustments to your pronunciation in order to improve it.

How Reading Horizons v5 Addresses Teaching Pronunciation:

Because pronunciation is helpful in learning vocabulary, students are able to click on a word to hear it repeated, as desired, using the sound icon next to the word in the Vocabulary section. Also, with regard to self-monitoring, students are provided with opportunities to self-monitor by recording themselves saying the word and then comparing their pronunciation with the narrator’s pronunciation, using the recording function in the bottom left of the screen.

In addition, the Pronunciation Proficiency tool on the Reading Horizons v5 software allows students to see an animated diagram and video of how to pronounce each of the sounds students learn in the program. First, students click on a sound they want to practice. As they click on the sound they want to practice, they see an animation of the articulation of the mouth pronouncing the sound, as well as the tongue placement and airflow. Students also are shown whether the sound is voiced or voiceless. Students can also click on the video button to see a human mouth producing the sound. Students can record themselves saying the sound and compare their pronunciation with the narrator’s.
The ESOL Supplement in the back of the *Teacher's Manuals*, as well as the student-consumable *English Language Enhancement*, includes graphics and written descriptions of how to produce each sound, for class instruction and review.
English Language Learners

What the Research Says about Teaching Reading to ELLs:
- Use simple instructions, modeling, and routines.
- Provide native-language translations.
- Variety and practice are important.
- Provide opportunities to transfer learned skills to “real-life” reading, and connect decoding to students’ lives.
- Consider the time spent on task.
- Teach ELLs how to learn vocabulary and how to improve pronunciation.

What the Research Says about Using Simple Instructions, Modeling, and Routines:
“The finding ... points to the importance of giving instructions that are simple and clear, and of demonstrating and modeling so that frustration and anxiety are reduced and students can focus on ‘meaning-making.’..."

“Language learners need enough energy in terms of cognitive resource to focus on language learning. If tasks are constantly changing or if instructions contain new words and phrases, learning is really inhibited. So I like to encourage teachers to keep a certain amount of classroom interaction routine when they are introducing new concepts. That lets people focus on the learning rather than on the procedures.”31

How Reading Horizons v5 Uses Simple Instructions, Modeling, and Routines:
Narrated instructions in the Reading Horizons v5 software and direct-instruction materials are kept as simple as possible. Instructions in the software are accompanied by animated modeling to provide additional visual support for students who need it.

The Comprehensive and Condensed Teacher’s Manuals provide visual examples of words that follow the skills being taught, to demonstrate the skills visually on the board.
Student-consumable materials, such as the Student Workbook, provide modeling by showing examples of how to correctly complete each activity, where appropriate.

Skill checks, lesson instruction, Most Common Words lessons, vocabulary practice, and Chapter Tests follow similar routines throughout the software program so students know what to expect as they progress through the course. Teacher’s Manuals also provide a routine through the use of review, teacher instruction, and student-involvement sections in each lesson.

**What the Research Says about Providing Native-Language Translations:**

“Judicious use of the native language [makes] a difference in both reading and oral language skill acquisition as shown by results on standardized tests ... Students had higher gains when the students in the class shared a language – (in our case, Spanish) – and the teacher was bilingual and used Spanish here and there, to give instructions, or to clarify, or to offer a quick translation of a difficult term. ...

“The classes where the teacher used the native language here and there had higher gains. ... Once the instructions are clear, the task becomes manageable.”

“In terms of the native language, we do need to rethink that ‘English only’ idea, and that fear that any minute spent in native language takes away from English learning. That is actually not true. We need to really think about how to provide opportunities for students to have enough time on task really to become fluent in English. This calls for multiple opportunities to use English while facilitating learning by using the native language here or there or, if that is not possible, taking time out to demonstrate or model the tasks or use visual information to get our point across.”32
How *Reading Horizons v5* Provides Native Language Translations:

*Reading Horizons v5* provides native-language translations for students who need additional native-language support. Native languages include Spanish, Mandarin Chinese, Japanese, and Haitian-Creole. Additional native-language translations will be added in the future. Teachers and administrators can activate the native-language translation tracks in the Administration System.

If a native-language track is activated in the Administration System, translations for each vocabulary word that students encounter in the Vocabulary tab of the software will be visible.

In addition, students can read and/or hear a summary of each section of the lesson translated into their native languages.
What the Research Says about Providing Variety and Practice:
“[Teachers] need to provide a sufficient focus on structure and practice. We can’t just assume that literacy students will pick up reading and writing skills on their own, through mere exposure and continued acquisition of English. This may be true for students who have a sound foundation in literacy in the native language, but it’s not true for students who lack these skills.”

“Students need a chance to interact with print, to practice, and to ‘get it down.’ At the same time, they benefit from different kinds of experiences that reinforce language and literacy skills. This kind of balance between routine and variety made a difference in their scores on standardized testing.”

“...Students need practice and they need variety. I think in our emphasis on communicative competence we sometimes forget how much practice is needed before literacy and English take hold and become internalized or ‘automatized.’ On the other hand, if language input and language tasks become repetitive and boring, the brain shuts down and learning slows way down. ... By the same token, if everything was new all the time, and lots of different activities came at the students without a clear focus on what they needed to learn, they [don’t] do as well either.”

How Reading Horizons v5 Addresses Providing Variety and Practice:
Please see the sections “Motivation” (pp. 9-10) and “Vocabulary: Providing Repetition and Practice” (pp. 16-17) in this document to see examples of how variety and practice are incorporated into Reading Horizons v5.

What the Research Says about Providing Opportunities to Transfer Learned Skills to “Real-Life” Reading and Connecting Decoding to Students’ Lives:
“One of the key findings for reading development was that students learned more, as measured in movement on standardized tests, in classes where the teacher made the connection between life outside the classroom and what was learned in the classroom than in classes that did not. ...”

“... If teachers led field trips where students had to use English; or brought in grocery fliers or catalogues to read and discuss; or used as literacy materials cereal boxes or soup cans to figure out calories, all of which are materials and information that reflected the literacy that students deal with in their everyday lives, the impact was stronger. We called this ‘bringing in the outside.’ Bringing in the outside made a significant difference in reading gains on standardized tests.”

“We found that building on what students are interested in outside of the classroom results in success.”

“The findings speak for building a rich curriculum that makes a connection between the language and literacy used inside and outside of the classroom and lets these students see that they are gaining skills that reflect what’s needed in daily life. ... These materials also form the basis for building fluency, discovering
patterns, developing vocabulary, and practicing various subskills. Their use ties back in with the finding about practice and variety.\textsuperscript{36}

**How Reading Horizons v5 Addresses Providing Opportunities to Transfer Learned Skills to “Real-Life” Reading and Connecting Decoding to Students’ Lives:**

Students are given opportunities to immediately transfer learned skills to real-life reading, using the Reading Horizons *Reading Library*. The 228 non-fiction reading passages are available in book form …

and in electronic form in the Library section on the *Reading Horizons v5* software.

Students are given opportunities to practice applying the skills they learn in real-life reading contexts, such as a menu, recipe, passport application, blog posts, newspaper articles, street signs, and Web advertisements.
These readings are found both on the software and in the Student Workbook.

**What the Research Says about Considering the Time Spent on Task:**
“The basic attendance finding was that it didn’t matter how many hours for class that students came but the percentage of class time they came. Rate of attendance matters more than the hours per se. For example, a student who comes to class almost every day and then drops out after three and a half months ends up doing better than a student who only attends sporadically but stays for the full six months of the course. This is true even when the total number of class hours attended are the same.”

**How Reading Horizons v5 Addresses Time Spent on Task:**
Teachers and administrators can track the time students spend on the Reading Horizons v5 software, using the Time-on-Task tool in the administration system. Teachers can keep a pulse on how students are using their time while engaged in the software and can make appropriate adaptations and suggestions, as necessary.

**What the Research Says about Teaching ELLs How to Learn Vocabulary:**
“In order to take control of their vocabulary learning, learners need to know what vocabulary to learn, how to go about learning it, and how to assess and monitor their progress. This vocabulary requires a range of learning strategies.”
How Reading Horizons v5 Addresses Teaching ELLs How to Learn Vocabulary and Pronunciation:

The English Language Enhancement booklet is a consumable student book. It provides ESOL students with vocabulary strategies, pronunciation practice, and a culture reference to expand the program’s usefulness to ESOL learners. Students learn why and how to use each vocabulary strategy, followed by opportunities to practice applying the strategy. After using the strategy, students evaluate how well the strategy worked for them. Students then discuss the vocabulary strategy with a teacher or friend and then have the teacher or friend “sign off” on the strategy for accountability and review.

Students are provided opportunities to practice pronunciation activities and are explicitly taught how to self-monitor their pronunciation. Students also set goals for improving their pronunciation to help them to continue to practice areas of weakness.
Lessons

- The *Reading Horizons v5* software showcases an entirely new visual experience for students. Sixty-eight skill-based lessons, 13 Most Common Words (MCW) lessons, and six Chapter Tests (interim tests) are spread across six chapters that include built-in fluency and comprehension assessments to determine student progress.
  - After logging in, students arrive at the new dashboard screen, where a synopsis of their progress through the program is displayed. The *Reading Horizons v5* software affords ample opportunities for students to monitor their progress and to celebrate their successes.
  - Students will select their next lesson from the list. Similar lesson types are visually represented with icons. Students may elect to take a skill check to bypass material they know. If they successfully pass the assessment, they will be presented with a skill-summary (quick-instruction) track that ensures their understanding and then allows them to advance. Students who fail to pass the skill check, or who did not elect to take it, will take the full lesson. This allows students to control their paces through the program. All lessons are designed to add material when and where needed to ensure student understanding. Lessons pull new vocabulary from a database of 10,000 terms to ensure a unique experience every time.
  - The alphabet portion of the program has been redeveloped to allow for more student discretion on the activities used to reinforce concepts. They may also test out of this section and move on to more-challenging material.
  - The Most Common Words lessons have been moved to a section of their own and can be taken or reviewed in sequence of the skills to ensure they complete each Most Common Words list before advancing to the next chapter. Students can also go back to review the Most Common Words activities at any time once they have been sufficiently and successfully completed in sequence. These lessons are activity based and allow students to self-select the activities that interest them the most for review and practice of the Most Common Words.
  - Reference lessons have been created for students who need extra grammar and language help. They can be accessed by students at their discretion or if assigned by the teacher.
  - At the end of each lesson, students can review their scores, jump back to specific points in the lesson to review particular concepts, and retake only those concepts with which they had the most difficulty. They may also choose to rerun the lesson in its entirety or to take a new refresher track.
  - Students have the option of a male or female voice track that can be changed, as desired. They may also adjust the volume settings and background color.
Every lesson is entirely voice narrated and includes hundreds of graphics depicting the vocabulary that is being studied.

*Reading Horizons v5* software lessons provide students with the opportunity to immediately transfer what they are learning in “real-life” situational readings. Students will enjoy the various signs, ads, menus, and many more readings that allow them to apply what they are learning.

Reading passages are divided into bronze, silver, and gold passages. Bronze passages are passages that are below the student’s current reading level. Silver passages are at the student’s current reading level. Gold passages are one level above the student’s current reading level. Grouping passages in this way helps students to select appropriate-level passages.

Student motivation is increased through the accumulation of points as they complete each lesson and other activities. Point totals are kept on the dashboard. Points are used to select stories from the Library. Students earn one point for reading bronze-level passages, two points for reading silver-level passages, and three points for reading gold-level passages. This helps to motivate students to read appropriate-level material without denying them the opportunity to read passages of interest to them that are below their reading levels.

**Vocabulary**

- The Vocabulary tool may be accessed at any time, and it contains vocabulary relating to the skills that are being learned by the student. Student participation in Vocabulary is dependent on the options that have been set. The activities that the students engage in do not supersede the skills taught to that point. There are over 10,000 words in the *Reading Horizons v5* software database for student practice.
  - Vocabulary allows the students to do the following:
    - Words are pronounced, defined, and used in sentences. Students see many words illustrated with graphics. They phonetically decode each word, as well as pronounce and record it in order to compare their pronunciation with the narrator’s.
    - *Phonics*: Students actively mark words to become familiar with likely and unlikely sequences of letters and to learn how to break words into syllables.
    - The Search option allows students to search for words of interest in the database.

**Library**

- *Reading Horizons v5* software showcases a new tool to build fluency and comprehension for students as they develop their decoding skills. The Library component contains nearly 230 high-interest, low-readability, non-fiction passages that have been leveled for students.
Passages have been written in 15 different genres, ranging from Sports to Nature and from a first-grade to a twelfth-grade level.

Students begin accessing the Library component after Chapter One has been completed and will be required to use points accumulated through completion of lessons and vocabulary activities to enable access to the desired passages.

Students select the desired passage and are then given a list of challenge words from the passage. Next, they click on a start button to begin reading while the computer times the student reading silently. Students then click on the Finish button when they have finished reading to stop the timing. Comprehension questions are then administered. Students earn a composite fluency score, which incorporates reading rate and comprehension score. After students see their scores, they have the option to retime themselves reading the passage and answering comprehension questions they answered incorrectly the first time they answered the questions. If students opt to reread the passage, they receive a weighted composite fluency score. Students can also listen to the narrator read the passage to them to practice oral fluency, or they can select a skill they have recently learned in the software to see words in the passage that follow that skill highlighted in the passage. Students can reread or practice with the passage as much as they want before moving on.
Endnotes


Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.

Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.

Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.

Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.

Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.

Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.

Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.

Heide Wrigley; Focus on Basics; Volume 6, Issue C :: September 2003. Available at http://www.nesall.net/?id=189.