Science of Reading for K-3 Interventions
Features of Evidence-Based Intervention Programs *This serves as the rubric used for evaluation of intervention programs bid for state review.*
Section 1: Research Alignment – The program reflects current and confirmed research in reading and cognitive science.

1. For the grades for which the program is submitted, the program must include evidence of alignment to ESSA Evidence Level 1, 2, or 3.

   Evidence of alignment: https://www.evidenceforessa.org/program/passport-to-literacy-voyager-passport/

2. The program provides evidence of grounding in conceptual research and theoretical models with reference to research articles and websites.

   Voyager Passport was developed using the input and advice from a team of leading literacy researchers and experts, including the following:

   - María Elena Argüelles, Ph.D. is an educational consultant who provides support to states, districts, and schools in their implementation of effective reading instruction for young English language learners (ELs) and struggling learners. Dr. Argüelles is the coauthor of several publications and a consultant to publishers that develop programs for struggling readers and ELs. In addition, she has teaching experience at the public school level as well as at the undergraduate and graduate levels. Her primary areas of interest are early reading instruction, students with reading difficulties, and reading instruction for ELS.
   - Anne Cunningham, Ph.D. served as the UC Berkeley director of the Joint Doctoral Program in Special Education. She has served as an elected board member of the Society for the Scientific Study of Reading and American Educational Research Association's Division C-Learning and Instruction, as well as a member of the editorial boards of the Journal of Educational Psychology, Reading, and Writing: An Interdisciplinary Journal; The Reading Teacher; and The California Reader.
   - Marcia Henry, Ph.D. 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, Henry speaks frequently at conferences and writes for and serves on the editorial boards of several professional journals.
   - Janette Klinger, Ph.D. is a professor at the University of Colorado at Boulder and is a former bilingual special education teacher. She has authored or coauthored more than 90 journal articles and book chapters and coauthored or coedited 10 books. In 2007, she coauthored Teaching Reading Comprehension to Students with Learning Difficulties with Sharon Vaughn and Alison Boardman.
   - Julia Peyton, Ph.D. joined Voyager Sopris Learning in 2005 after teaching at the University of Oregon with Dr. Roland Good. Dr. Peyton served as a researcher on the *DIBELS* research team, spent seven years conducting research in the area of effective scientifically based supplementary reading instruction for at-risk populations, and has collaborated on

multiple studies in the area of early identification and intervention for reading disabilities under the Office of Special Education Programs. She recently coauthored 7 articles in the area of reading interventions targeting at-risk populations. Dr. Peyton received her Ph.D. in Education from the University of Washington.

For additional information, the *Voyager Passport* Research Foundations is included in the back of this document.

In addition, *Voyager Passport* instruction was developed using scientifically proven methods and evidence associated with the vast body of research and study that has become known as the Science of Reading. In the new edition of *Voyager Passport* submitted for the Florida adoption, we have included "Teacher Talk" callout boxes in the Teacher Guides. These callout boxes highlight the scientific reasoning behind various instructional components and allow teachers to make a connection between what they are teaching in the lesson and the Science of Reading.

3. There is an emphasis on teaching and learning the six essential early literacy components (oral language, phonological awareness, phonics, fluency, vocabulary and comprehension) as applicable.

   Voyager Passport is a research-proven, comprehensive reading intervention. The instructional design and purpose of the program is providing explicit and systematic instruction of the six essential early literacy components/skills to accelerate non-proficient K-3 readers to grade level proficiency.

4. The program reflects the understanding of "Structured Literacy" and that reading is a language-based skill and learning to read depends on mapping sounds to print (e.g., Scarborough's Reading Rope).

   Voyager Passport instruction was designed using the principles of Structured Literacy.

   The following description explains the connection with Scarborough's Reading Rope:

   Voyager Passport's consistent lesson format is divided into two main instructional components. The "Word Works" instructional component focuses on the foundational skills of literacy and aligns to the "Word Recognition" strands/skills of Scarborough's Reading Rope. The "Read to Understand" instructional component (or "Listen to Understand" in kindergarten) focuses on more advanced literacy skills and aligns to the Language Comprehension strands/skills of Scarborough's Reading Rope. Depending on the *Voyager Passport* level and lesson, the intensity of each instructional component will vary to match the developmental needs of students, but every lesson is designed to strengthen and support all of the essential skills of reading.

Section 2: Omission of Three-Cueing System for Word Reading – The program reflects the omission of three-cueing, which is an instructional approach to foundational skills instruction in reading that involves the use of three different types of instructional cues: semantic (gaining meaning from context and sentence-level cues), syntactic or grammatical features, and grapho-phonic (spelling patterns) elements in lieu of explicit instruction in phonic decoding and encoding.
The primary instructional strategy for teaching word reading is phonics instruction for decoding and encoding.

1. The three-cueing system is NOT taught as a strategy for teaching word reading.

   Voyager Passport does NOT include the three-cueing system.

2. Guidance is NOT provided to memorize any whole words by sight without attending to the sound/symbol correspondences. Irregular or temporarily irregular words have specific sounds or patterns that can be taught through a process called orthographic mapping. Students should use phonics to decode most of the word and commit to memory the irregular letter(s).

   Voyager Passport does NOT use memorization of whole words by sight without teaching the decoding skills and allowing students to apply these skills with the parts of the word that can be decoded.

3. Instruction does NOT encourage students to memorize whole words, read using the first letter only as a clue, guess at words in context using a "what would make sense?" strategy, or picture clues rather than phonic decoding.

   Voyager Passport does NOT encourage guessing, looking for clues, or using pictures to determine unknown words.

4. Words with known sound-symbol correspondences are NOT taught as whole-word units, often as standalone "sight words" to be memorized.

   Voyager Passport does NOT teach words by whole word units if they are phonetic.

5. Fluency assessment does NOT allow acceptance of incorrectly decoded words if they are close in meaning to the target word (e.g., assessment based upon the cueing systems, meaning, structure/syntax and visual (M/S/V)).

   Voyager Passport Adventure Checkpoints, used in every 5th and 10th lesson, requires students to decode words correctly and does NOT accept incorrectly decoded words.

6. Students do NOT practice spelling by memorization only (e.g., rainbow writing, repeated writing, pyramid writing).

   Voyager Passport teaches appropriate encoding skills and does NOT teach students to spell by memorization only.

7. Foundational skills assessments are NOT primarily running records or similar assessments that are based on whole language or cueing strategies (e.g., read the word by looking at the first letter, use picture support for decoding).

   Running records are not an assessment of *Voyager Passport*.

Voyager

PASSPORT

Voyager Passport®
Research
Foundations

Phonological Awareness

Research has established that the most effective interventions in reading incorporate instruction in phonemic awareness with training in letter-sound correspondences (Bus & van Ijzendoorn, 1999) and explicit instruction in alphabetic and phonemic decoding skills (Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998; Foorman & Torgesen, 2001). For this purpose, *Voyager Passport*® provides systematic instruction in phonological awareness, phonemic awareness, and phonics in Levels A–F.

Phonological awareness is a skill that helps readers distinguish and work with parts of oral language such as rhyming, syllables, and word parts. Students who are successful in rhyming, alliteration, word repetition, and syllable counting will be prepared to translate those skills when learning how to read, spell, and write. Phonemic awareness (PA) is the ability to recognize and manipulate the individual sounds in words. The most critical skills in PA are blending (e.g., the sounds /b/ /ă/ /t/ make the word bat) and segmenting (e.g., the word bat has the sounds /b/ /ă/ /t/). PA, especially segmenting and blending individual sounds in simple spoken words, predicts future reading problems in kindergarten and first grade (Scarborough & Brady, 2002). PA instruction is most effective when sounds are paired with letters, when one or two skills are taught at a time, and when students are taught in small groups (Ehri, Nunes, Willows, Schuster, Yaghoub-Sadeh, & Shanahan, 2001). PA is critical for learning to read and write any alphabetic writing system (Brady, 2011; Boyer & Ehri, 2011).

Phonics

The goal of phonics instruction is to teach students the relationships between spoken sounds and printed letters for use in reading and spelling words. Systematic and explicit instruction in phonics, including word patterns, morphemes, syllable types, affixes, and strategies for decoding multisyllabic words, is the most effective way to ensure reading growth (Berninger et al., 2003; Henry, 2003).

To read a wide range of words, students must first learn the sounds associated with the letters. Beginning reading and spelling instruction that includes systematic, explicit phonics has the edge over approaches that indirectly or incidentally teach phonics (Boyer & Ehri, 2011). *Voyager Passport* lessons begin the word study element by teaching specific sounds associated with single letters, vowel teams, diphthongs, and digraphs followed by opportunities to read words with the newly learned pattern and judicious review of previously taught phoneme-grapheme relationships. The instruction builds in *Voyager Passport* to teach the six important syllable types, affixes, and strategies for decoding multisyllabic words. Words with irregular spelling patterns are also taught explicitly with extensive review. Explicit instruction means the teacher provides clear and precise instruction, and systematic instruction means that the teacher has a specific plan or sequence for introducing letter-sound relationships (Kilpatrick, 2015). The phonics and spelling instruction in *Voyager Passport* is directly linked to word, sentence, and passage reading. Students receive immediate practice applying newly learned phonics skills in text. The text in *Voyager Passport* has been specially designed to correspond with the phonics skills students are learning while engaging them in high-interest topics.

Fluency

According to the National Reading Panel (2000), fluency is the ability to read text with speed, accuracy, and proper expression. Fluent readers sound as if they know what they are reading about and are able to focus on comprehension without directing a large concentration of resources to decoding words.

Fluency instruction is an often forgotten component of reading instruction, particularly in the upper elementary grades. However, fluency is a key component of successful reading. Repeated reading with guided and informed feedback is an effective practice for improving reading fluency and reading achievement (Chard, Vaughn, & Tyler, 2002; Homan, Klesius, & Hite, 1993).

Fluency is specifically addressed in every *Voyager Passport* lesson from *Voyager Passport* A–F. *Voyager Passport* begins fluency instruction with early reading skills in *Voyager Passport* A, including naming letters, naming sounds, and reading words. As students develop more advanced reading skills, the fluency lessons focus on text-level reading utilizing repeated reading. Teachers model appropriate reading rates and expression. Students repeatedly read passages aloud with feedback and support to improve their reading rate. Strategies for chunking text are also explicitly taught to improve overall reading rate. Finally, timed readings motivate and challenge students to improve their rate while monitoring their own progress.

The repeated exposures in *Voyager Passport* provide students who are struggling to learn to read with the type of practice that more proficient readers have mastered in utilizing phonic knowledge to figure out unknown words (Ehri, 1991; National Reading Panel, 2000). Practice in decoding is followed by opportunities to read the material fluently. In the *Voyager Passport* lessons, students benefit from experiences as proficient readers of text through the use of modeling, partner reading, and repeated reading of the same passage.

The multiple exposures provided in the lessons allow students to develop confidence along with proficiency.

Vocabulary

Vocabulary refers to the words a person understands and uses in listening, speaking, reading, and writing. Students learn word meanings through direct and indirect experiences with oral and printed language (National Reading Panel, 2000).

One of the most well-established findings of educational research is that reading comprehension and vocabulary knowledge are highly correlated with one another (Adlof & Perfetti, 2014). 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).

Voyager Passport addresses vocabulary instruction directly and indirectly. In *Voyager Passport* A and B, specific high-utility words are incorporated in teacher Read-Alouds and discussions with students to extend the meanings of the words taught. In *Voyager Passport* C and D, students read the passages with the teacher. At these levels, vocabulary words are taught as part of the passage reading and comprehension section of the Read to Understand component. In *Voyager Passport* E and F, new word meanings are directly taught, students are provided with oral and written practice opportunities to gain facility with the new words, contextual uses of the words are identified, and words are utilized in passages allowing for integrated discussions of word meanings and passage meanings. Students interact with the words in new contexts in subsequent lessons. Direct, explicit instruction in vocabulary that students will encounter frequently in text occurs throughout the lessons in *Voyager Passport*.

Comprehension

Comprehension is the ability to understand and gain meaning from language. 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 by teaching students to monitor their comprehension, organize and retell information presented, recognize story structure, generate questions about the text, predict outcomes in the text, and confirm or revise predictions (National Reading Panel, 2000).

Voyager Passport lessons effectively incorporate comprehension instruction in the Read to Understand component before, during, and after reading. In *Voyager Passport* A and B, both listening and reading comprehension are a focus. In Levels C–F, as students begin reading more difficult text, reading comprehension becomes the main focus. Critical comprehension strategies are taught and practiced throughout the lessons, including: previewing text; building background knowledge and activating prior knowledge; identifying text features; making and verifying predictions; retelling; identifying facts and details; generating questions; sequencing; identifying cause and effect; summarizing; generating main ideas; comparing and contrasting; and examining story structure. The comprehension strategies are explicitly taught in small, sequential steps and modeled by teachers. Students then implement and practice strategies with text read by the teacher (listening comprehension) and text read by students (reading comprehension). Comprehension techniques are reviewed frequently throughout *Voyager Passport* so students receive multiple practice opportunities and retain mastery.

References

Beck, I., McKeown, M., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford Press.

Berninger, V. W., Nagy, W. E., Carlisle, J., Thomson, J., Hoffer, D., Abbott, S., Abbott, R., Richards, T., & Aylward, E. (2003). Effective treatment for children with dyslexia in grades 4–6: Behavioral and brain evidence. In B. R. Foorman (Ed.), *Preventing and remediating reading difficulties: Bringing science to scale* (pp. 381–417). Baltimore: York Press.

Boyer, N., & Ehri, L. C. (2011). Contribution of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading*, 15(5), 440–470.

Brady, S. A. (2011). Efficacy of phonics teaching for reading outcomes: Implications from Post-NRP research. In S. A. Brady, D. Braze, & C. Fowler (Eds.), *Explaining individual differences in reading: Theory and evidence* (pp. 69–96). New York: Psychology Press.

Bus, A. G., & Van Ijzendoorn, M. H. (1999). Phonological awareness and early reading: A meta-analysis of experimental training studies. *Journal of Educational Psychology*, 91, 403–414.

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.

Ehri, L. (1991). Development of the ability to read words. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of Reading Research* (pp. 383–417). New York: Longman.

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Sadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250–287.

Foorman, B. R., Francis, D. J., Fletcher, J. M., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, 37–55.

Foorman, B. R., & Torgesen, J. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research and Practice*, 16, 203–212.

Henry, M. K. (2003). Unlocking Literacy: *Effective Decoding and Spelling Instruction*. Baltimore: Paul H. Brookes.

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, 94–99.

Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Hoboken, NJ: Wiley.

National Reading Panel. (2000). *Report of the national reading panel: Teaching children to read*. Bethesda: National Institute of Child Health and Human Development.

Scarborough, H. S., & Brady, S. A. (2002). Toward a common terminology for talking about speech and reading: A glossary of the "phon" words and some related terms. *Journal of Literacy Research*, 34(3), 299–336.