RESEARCH & VALIDATION | FOUNDATION PAPER

FEBRUARY 2019

Scholastic F.I.R.S.T.®

A Personalized Approach to Building Foundational Reading Skills in Grades PreK–2

SCHOLASTIC

CONTACT

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TABLE OF CONTENTS

INTRODUCTION

Learning to read with fluency and comprehension means mastering a set of complex skills that help readers to decode and understand words in a text. The process of learning to read begins in infancy, as babies begin attending to the speech signals in their environment and begin producing spoken language. The experience that young children gain while processing oral language during their early years is strongly related to the reading and learning they will do in school. Furthermore, the number of words that children hear spoken in the home is directly correlated with academic success (Hart & Risley, 2003; Fernald, Marchman, & Weisleder, 2013); in other words, the more words they hear, the likelier they are to do well in school. Relatedly, the amount of time that a child spends listening to parents, teachers, or other adults read aloud is a strong predictor of that child's reading ability later in life (Lonigan & Shanahan, 2009; Norton & Wolf, 2012).

Research that examines temporal processing—how the brain perceives sound—indicates that students who are taught to identify sounds and letters with automaticity have a stronger literacy foundation than their peers who do not acquire these skills (Steinbrink, Zimmer, Lachmann, Dirichs, & Kammer, 2014). Research in this field, as well as research on language and literacy development, informed the creation of Scholastic F.I.R.S.T. (Foundations in Reading, Sounds & Text), an engaging reading program that helps students in Grades PreK–2 become fluent readers.[1] F.I.R.S.T. teaches each of the National Reading Panel's (NRP) five foundational skills: *phonemic awareness, phonics, fluency, vocabulary,* and *comprehension* (National Institute of Child Health and Human Development [NICHD], 2000) in an engaging, purposeful, and supported environment.

ABOUT THIS REPORT

This report explores critical research in literacy instruction and temporal processing that identifies what young students need to learn in order to become successful readers. It then describes the NRP's five foundational skills and explains how each is integral to Scholastic F.I.R.S.T.'s reading program.

[1] Informed by Dr. Kay MacPhee's program, SpellRead, a reading comprehension program for older children and adults.

OVERVIEW OF SCHOLASTIC F.I.R.S.T.

Scholastic F.I.R.S.T. (Foundations in Reading, Sounds & Text) is an instructionally robust, highly adaptive digital adventure on Ooka Island that teaches the five foundational reading skills: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Through developmentally appropriate and highly personalized practice, F.I.R.S.T. builds a solid foundation for students to become confident readers.

Digital instruction supports young learners when it is both enjoyable and highly motivating. Rooted in research and guided in real time by READirect analytics, the full 80-hour F.I.R.S.T. program delivers instruction within an interactive, engaging, and personalized learning environment that includes manageable learning tasks, ongoing feedback, reinforcement of learning concepts, and encouraging characters like Auntie Kay and Zobot.

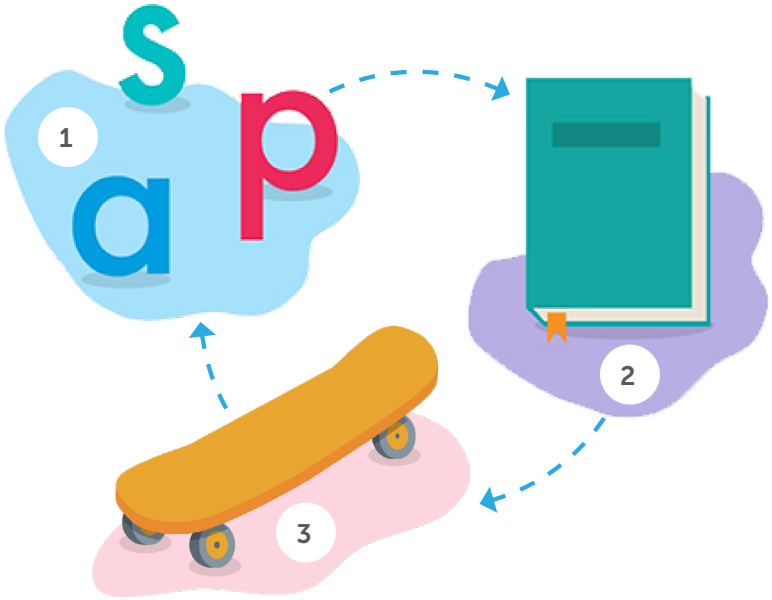
All students begin their adventure on Ooka Island by creating customizable avatars to represent themselves in the program. As students progress through their adventure teaching the Ooka Elves to read, they earn stickers and new and fun items for their avatar.

F.I.R.S.T. begins with an introduction to *phonemes*—single sounds that are the smallest units of spoken language. Students encounter each phoneme among the other sounds and in multiple activities (e.g., blending, segmenting, rhyming, etc.) throughout the program to build automaticity. All of these concepts are reinforced throughout F.I.R.S.T.'s 24 levels using auditory and visual cues to guide students as they build reading skills. Within these 24 levels, each reader also experiences a set of 6,695 rigorously designed micro-actions that provide a personalized path to becoming a confident reader.

Student customizing avatar

Scholastic F.I.R.S.T. Learning Cycle

F.I.R.S.T. incorporates a purposeful learning cycle that comprises three distinct parts: *guided phonological activities, reading for comprehension,* and *free choice*. Throughout the duration of the F.I.R.S.T. learning experience, this repeating cycle adapts to the learner and provides new, personalized content for each individual reader.



Scholastic F.I.R.S.T. learning cycle

1. **Guided Phonemic Awareness and Phonological Development**
   During guided phonological activities, students develop phonemic awareness and phonological skills as they make their way through the 24 activity levels. Each F.I.R.S.T. learning cycle begins with guided phonological activities that teach research-based concepts such as auditory discrimination of single phonemes, blending, and rhyming. While all students begin at the same starting point, F.I.R.S.T. will adapt to each individual learner by level three.

2. **Reading for Vocabulary, Fluency, and Comprehension**
   F.I.R.S.T. includes 85 ebooks that are designed and leveled to bring a non-reading student to the beginning of Grade 2. After completing guided phonological activities, students read a new ebook to build concept of word (spoken-written correspondence), vocabulary development, sight words, fluency, and comprehension.

3. **Free Choice**
   During free choice, students have time to revisit their favorite activity or reread a book, shop at the Mist Mart, or customize their avatar. The free choice activities further engage students through their Ooka Island adventure and provide additional positive reinforcement.

CREATING CONFIDENT READERS

In the late 1990s, the National Reading Panel (NRP), a group of expert educators and scientists, conducted a review of existing research on reading instruction and identified the most effective methods for teaching children to read. The NRP concluded that in order to become a confident reader, students must master five foundational skills: phonemic awareness, phonics, fluency, vocabulary, and comprehension (NICHD, 2000). Today, experts know that mastering these five skills is crucial, and that each must build upon the other and be reinforced in order to create a confident reader (Gamse, Bloom, Kemple, & Jacob, 2008).

INFLUENCE OF ORAL LANGUAGE ON READING

"Oral language functions as a foundation for literacy and as the means of learning in school and out" (Fillmore & Snow, 2000, p. 14). A student who encounters text that mimics oral language is better equipped to make the connection between oral and written words. Reading instruction that begins with oral language feels natural and intuitive for beginning readers, and brings about ease and comfort with text.

Acquisition of the five essential foundational skills for learning to read depends on a strong oral language base. "Children's speaking and listening lead the way for their reading and writing skills, and together these language skills are the primary tools of the mind for all future learning" (Roskos, Tabors, & Lenhart, 2004, p. 13). Oral language sets the stage for literacy instruction, and competency in oral language is predictive of reading accuracy and comprehension (Foorman, Herrera, Petscher, Mitchell, & Truckenmiller, 2015).

Phonemic Awareness

When students learn how to listen for and manipulate sounds in language, it helps them learn to read. Phonemic awareness is the ability to listen for and manipulate phonemes—the smallest pieces of spoken language. Phonemes are the basic element of language that allows each of us to discern differences in the meanings of the words that we hear and read. Phonemic awareness is one of two important indicators that has been recognized through research (Anderson, Hiebert, Scott, & Wilkinson, 1985; Bishop & Adams, 1990; Snow, Burns, & Griffin, 1998) as predictive evidence of how students will learn early reading skills.

Teaching phonemic awareness involves supporting students while they begin to manipulate and explore phonemes, first with single sounds and then in syllables and words. Understanding that all words in the English language are created from a discrete set of sounds is vital for anyone learning to read (Lundberg, Frost, & Petersen, 1988; International Reading Association, 1998).

Some of the first important work a beginning reader will do is to recognize that words are made of phonemes (sounds), that these phonemes are composed of letter combinations, and that the phonemes can be arranged to form new words (International Reading Association, 1998; Gunning, 1996). "[E]very spoken word can be conceived as a sequence of phonemes. Because phonemes are the units of sound that are represented by the letters of an alphabet, an awareness of phonemes is key to [the] learning of phonics...and reading" (NICHD, 2000, p. 52). Introducing students to phonemic awareness gives them an opportunity to explore and manipulate phonemes in the spoken words they hear.

One reliable way to determine whether a student is ready to learn other phonological components is to ascertain whether the student understands how phonemes can blend together. As students develop phonemic awareness, they can begin to better understand what sounds distinguish one word from another. For example, the words *moon, noon,* and *soon* each contain the phonemes /oo/ and /n/, but the differentiator is the first phoneme in each word. "Phonemic awareness is this ability to take words apart, to put them back together again, and to change them to something else. It is a foundational skill around which the rest of the threads of reading are woven" (Tankersley, 2003, p. 6).

Phonics

Next, students must master phonics. Phonics instruction is intended to help beginning readers understand how sounds are represented by letters by providing a visual set of building blocks that connect to phonemic awareness. With this knowledge, students can start to apply their phonemic knowledge to reading and spelling by sounding out words that they encounter in text and, conversely, by spelling words. Once students understand the relationship between sounds and letters, they will progress beyond the simple mechanics of using phonemes to sound out words to reading automatically. When that happens, students can focus their effort and attention on comprehension.

Students receive many important benefits from mastering phonics: research indicates that students who learn phonics are better able to decode and spell than peers who do not receive phonics instruction (Scliar-Cabral, Morais, Nepomuceno, & Kolinsky, 1997); strong decoding skills lead to improved ability to understand and retain material that is read; good readers are able to learn pronunciation of new words by using phonics to break down written words into phonemes; and while explicit phonics instruction is important for all students who are learning to read, it is particularly beneficial for striving readers (Kim, Samson, Fitzgerald, & Hartry, 2010).

FLUENCY

Reading fluency is the ability to read text quickly, expressively, effortlessly, and with understanding. "Fluency is the bridge between decoding and reading comprehension" (Pikulski & Chard, 2005, p. 515); it provides the connection between word recognition and comprehension. A fluent reader is able to read out loud without much hesitation, using appropriate intonation and expression, while pronouncing most of the words correctly. It will sound natural, as if the reader is just talking.

Because a fluent reader effortlessly decodes words being read, they are able to devote attention to the meaning of the text. Fluency frees up the mind to connect ideas within the text, as well as to make associations between it and real-life experience. Essentially, a fluent reader recognizes words immediately and is able to comprehend them simultaneously. A student who is not a fluent reader will spend energy trying to decode words, missing the opportunity to reflect deeply on meaning.

Why Speed Matters to Reading Fluency

Auditory processing speed can predict how well a student will be able to process and decode words when learning to read. It is a better predictor of both reading and spelling abilities than other measurable cognitive skills such as working memory, attention span, and intelligence (Steinbrink et al., 2014). This connection indicates that before students can confidently link sounds to letters, increasing the speed with which they recognize individual sounds could greatly improve their reading skills and abilities in the future.

Learners with poor auditory processing do not develop "consistent and reliable neural representations of phonemes. As a consequence, they will struggle with the phonological awareness skills they need to break the code for reading" (Tallal, 2012, p. 16407). Auditory processing deficits result in poor representations of speech sounds in the brain, which can lead to difficulty connecting sounds to letters, and, consequently, to challenges around decoding, fluency, and comprehension.

VOCABULARY

Vocabulary is an essential building block of reading because students use word knowledge that they have acquired through oral language to make sense of words that they see in print. As students use their phonics skills to sound out new or unfamiliar words while reading, they also make connections with their own oral vocabulary (Beck & McKeown, 2007).

Most experts agree that there are four types of vocabulary: *listening*, *speaking* (sometimes known as *oral vocabulary* when combined with listening), *reading*, and *writing*. Proficiency in reading vocabulary is more difficult to achieve than it is in oral vocabulary because it depends upon quick, precise, and automatic recognition of the words in the text. Also, written words, figures of speech, syntax, and text structures are more complex than those that a student would encounter in everyday conversation (Mason, 2001; Medo & Ryder, 1993; Schleppegrell, 2001).

Vocabulary is an essential component of reading comprehension. Students need to recognize words and understand them in context of the text in order to make sense of what they read. If a word that is decoded is not in a student's oral vocabulary, then the student may have difficulty with comprehension even if they can sound it out accurately. "Vocabulary acquisition is crucial to academic development. Not only do students need a rich body of word knowledge to succeed in basic skill areas, they also need a specialized vocabulary to learn content area material" (Baker, Simmons, & Kameenui, 1995, p. 209). Only when students can decode and comprehend the words they are reading can they start to learn new information while reading (Moats, 2004; Nagy & Scott, 2000). Most importantly, once a student learns to read, vocabulary is essential to make that step toward reading to learn. Ongoing vocabulary instruction has also been shown to support reading comprehension in early readers (Brett, Rothlein, & Hurley, 1996).

New Words

Not all words students encounter in texts will exist in their oral language. Each new word needs to be identified, decoded, and understood. As a student builds on the five foundational skills, they can use phonemic or phonetic knowledge for decoding. In order to sound out and comprehend words more quickly, students must have meaningful encounters with letters and phonemes. "Quality encounters connect letters in a spelling to phonemes in the pronunciation, usually by sounding out and blending" (Murray, 2012, p. 36). Through targeted instruction around phonemes and words, letter combinations become more recognizable and a student can decode a new word faster.

COMPREHENSION

Reading comprehension occurs when there is mastery of phonemic awareness, phonics, vocabulary, and fluency. It is an intentional, active, and interactive process that occurs before, during, and after a person reads a text. "Comprehension involves constructing meaning that is reasonable and accurate by connecting what has been read to what the reader already knows and thinking about all of this information until it is understood. Comprehension is the final goal of reading instruction" (Gambrell, Block, & Pressley, 2002, p. 4).

A student with strong reading comprehension uses different strategies to make meaning of the text that they engage with (Baker & Brown, 1984; Pressley, Beard El-Dinary, & Brown, 1992), and it is tied to effort as much as it is to ability. In other words, a student must be motivated to try multiple strategies if they do not initially understand the text. A confident reader is able to apply comprehension strategies without the direction of a teacher or parent.

SCHOLASTIC F.I.R.S.T. AND FOUNDATIONAL SKILLS

Scholastic F.I.R.S.T. (Foundations in Reading, Sounds & Text) was explicitly and purposefully created to help students become confident readers by utilizing the NRP's five foundational skills. To be most effective, reading instruction must begin with basic and familiar oral language, which F.I.R.S.T. incorporates into its host of targeted activities and ebooks.

ORAL LANGUAGE

When children read in F.I.R.S.T., they encounter typical childhood experiences, conversational language, and recurring characters, so it is accessible and engaging for young learners. Using direct speech and speech balloons, F.I.R.S.T. puts the learner right into the story, so that from the beginning the student's existing language provides a framework for reading. This approach prepares young readers to make the connection between spoken and written language.

In order to learn the relationship between language and text, it is vital to teach in an auditory manner. Hearing spoken words activates the student's own internal sound system. In F.I.R.S.T.'s early ebooks, the student listens to accurate pronunciation while the story is read and follows the highlighted print. This builds awareness of how sounds and words are represented with letters. A student with good phonological awareness understands that spoken language can be broken down into sentences, individual words, and single sounds. These connections are reinforced through repeated exposure to F.I.R.S.T.'s ebooks and phonological activities.

Phonemic Awareness and Phonetic Learning in F.I.R.S.T.

To ensure that phonological skills become firmly established, F.I.R.S.T. breaks down the process of learning to read into micro-actions and ensures a student has mastered each skill before moving on to the next. Each activity is presented in a strategic order and builds upon previous work, and opportunities for additional practice are available when necessary. This careful hierarchy gives the student the best opportunity to develop the most efficient sound system for reading.

F.I.R.S.T.'s phonological activities include the essential pre-reading skills of alphabet recognition and sequencing. In Alphabet Mountain, the 26 letters of the alphabet are introduced in groups of three to five letters. F.I.R.S.T. begins with lowercase letters, as these are the letters most frequently seen in written text, and then progresses to uppercase letters.

As learners practice the alphabet, they also engage in phonological activities to gain understanding of how sounds associate with letters. For students to master phonemic awareness skills, F.I.R.S.T. explicitly introduces and teaches each of the 44 sounds of the English language, beginning with those that are easiest to hear and blend: /m/, /s/, /oo/, and /ee/. The Cave of Sounds is one such auditory activity where students learn the 44 sounds. Students are tasked with listening for a particular phoneme, and when the phoneme is heard, they click or tap anywhere in the cave to progress on their journey. Easier sounds can be lengthened or held (e.g., "mmm..."), so that a student can get a good grasp of the sound before blending it with another sound. Because sounds are presented in a strategic order, decoding a word such as *moon*, made up of three of the sounds, is a manageable task for most young learners. Each of the 44 phonemes is purposefully repeated and practiced among activities and levels, ensuring students build facility and ultimately, automaticity, with each sound. In this way, phonemic awareness is seamlessly translated into phonics learning in the F.I.R.S.T. program.

Once a sound (e.g., /m/) is mastered, F.I.R.S.T. provides repeated opportunities to reinforce the phoneme. Students will encounter the /m/ sound among other sounds and in other activities (e.g., blending, segmenting, rhyming, etc.) throughout the program to build automaticity with the phoneme. For example, by level six, students are blending consonant-vowel (CV) syllables, using /m/ with /ee/ or /oo/ and /aw/. By level 10, students are blending consonant-vowel-consonant (CVC) words that include /m/. As the program progresses and more phonemes are learned, students will continue to encounter the /m/ sound among sounds that are more difficult to hear and blend.

Consonant sounds, such as /d/ and /g/, are introduced later in the program, as they cannot be held and, when said, have a partial vowel sound included (e.g., the *d* sound actually sounds like /du/). The more difficult vowels are also the ones that cannot be held, and are said very quickly (e.g., /i/ as in *dig)*. Each of the three sounds in the word *dig* are very brief and harder to hear and manipulate in a word. More skill is needed to separate the sounds and then blend them back together to decode a word.

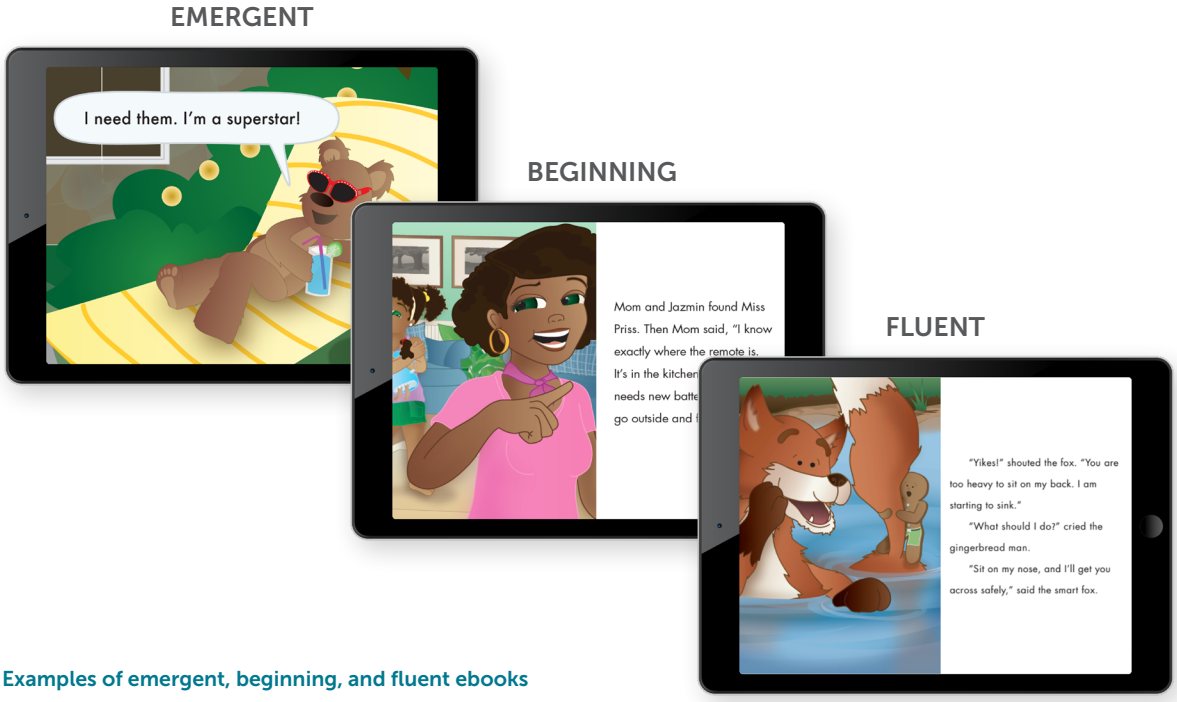
Following F.I.R.S.T.'s phonemic and phonetic activities, students read ebooks in order to reinforce newly acquired phonological knowledge.

Student practicing the sound /ee/ in the Cave of Sounds

Books Designed for Learning Through Oral Language

F.I.R.S.T.'s 85 leveled ebooks begin at the PreK level and go through early Grade 2, and include activities that follow each book. Titles are grouped into *emergent* (35 titles), *beginning* (40 titles), or *fluent* (10 titles) categories. Reading focuses on the development of concept of word (spoken-written correspondence), vocabulary development, sight words, fluency, and comprehension.

In the emergent ebooks, the use of speech balloons and the highlighting of words as they are read, in combination with guiding narration to foster comprehension, allow learners to use their knowledge of language to read. Familiar situations, characters, and natural language make it easier for students to make predictions about what will be said, even though they are not actually decoding words at this stage.



Examples of emergent, beginning, and fluent ebooks

FLUENCY

For reading to be considered fluent, phonemic awareness and phonetic skills must be efficient and automatic, and the learner must have sufficient exposure to good models of fluent reading, as well as consistent, guided oral reading practice. The F.I.R.S.T. program highlights each word as the narrator reads, and models proper phrasing, intonation, and the speed of fluent reading. Students are encouraged to read along with the second reading of each ebook and also to reread independently.

VOCABULARY

Vocabulary is carefully scaffolded throughout the ebooks as the complexity of the narrative and sentence structure increases. New vocabulary is introduced through guided read-alouds as the student goes through the first reading of a new book.

Once spoken-written correspondence is established, some less-familiar words are introduced into the stories. It is important that the student is exposed to some unfamiliar words, but not to the extent as to risk overwhelming the reader and affecting overall comprehension. In the later levels of the program, F.I.R.S.T. introduces new words frequently so that students have ongoing opportunities to build vocabulary.

These opportunities continue in the activities that follow the ebooks, through matching high-frequency words and practicing targeted replacement (teaching a new word by replacing a similar word, such as substituting *smart* for the word *clever*).

COMPREHENSION

In the F.I.R.S.T. program, comprehension is fostered by the use of very familiar language and story lines that will be easily understood by young learners. Students progressively encounter longer and more complex stories that include increasingly varied language. Through the first reading of each of the stories, guiding narration teaches the student strategies for how to think about the text and how to build understanding by making connections to their own knowledge and experience.

Activities following the reading also progress from surface details to in-depth thinking. For example, students are asked to determine the main idea of a story or compare and contrast characters or events from more than one story.

F.I.R.S.T. ensures that reading comprehension is supported as students are exposed to increasingly advanced texts. As students' sound-letter knowledge develops through reading and through F.I.R.S.T.'s phonological activities, they master an understanding of spoken-written correspondence and build sight vocabulary. This, along with the careful sequencing of the reading material, yields a steady progression toward independent reading. The F.I.R.S.T. program provides the essential foundational skills the learner requires to become a confident, efficient reader.

SCHOLASTIC F.I.R.S.T. ADAPTIVE PLATFORM AND REPORTING

SEAMLESS SUPPORT THROUGH THE ADAPTIVE PLATFORM READIRECT

All of the activities in F.I.R.S.T. have a very specific order of presentation and, combined with READirect and F.I.R.S.T.'s adaptive platform, students are supported in mastering the foundational skills through immediate scaffolding, activity READirect, and/or reading READirect.

Immediate Scaffolding

When a student selects an incorrect answer, the program provides scaffolded support through visual or auditory cues, audio instruction, or extended pacing of instruction. One example is in the Cave of Sounds activity where a student listens for a single sound among a group of sounds. If the student chooses an incorrect sound, the activity will repeat the correct sound and provide a visual flash to prompt the student to answer correctly. F.I.R.S.T.'s continuous formative assessment pinpoints the precise moment a student needs scaffolded supports and offers personalized supports to help a reader succeed.

Activity READirect

To ensure that a particular phonemic skill is truly mastered, students complete the activities at each level three times. Each skill is first introduced, practiced, and then assessed for proficiency. Before progressing to the next level, READirect analyzes a student's skills and, if necessary, provides supplemental activities that will bring that particular skill to mastery. This prevents a student from struggling or advancing to the next level without having mastered the preceding skills, ensuring a student firmly establishes the foundation necessary for later skills.

Reading READirect

As students move through the program, READirect analyzes their progress and guides them along a carefully sequenced book path. This path is determined by factors including a student's grade level, average scores across multiple ebooks, and activities at key milestones. At the key milestones, if a student's scores are below the threshold, they will be moved back to reread previous books, in order to build fluency and comprehension.

REPORTING SYSTEM

F.I.R.S.T. teaches the five foundational reading skills by breaking down the steps it takes to learn to read into 6,695 micro-actions. The specificity of these micro-actions allows for precise, detailed, and personalized reports that enable educators to monitor each student's individual progress.

Proficiency Reports

Proficiency reports display comprehension and phonological skills side by side, as skills are practiced and built in parallel, to ensure educators can get a complete picture of students' progress and areas of focus. The reports are based on targeted learning analytics of proficiency ranges (learning, practicing, proficient), and allow educators to identify learning gaps and mastery, which help to differentiate instruction or provide enrichment for specific students.

Ms. Kassam's Gr. 1 Class

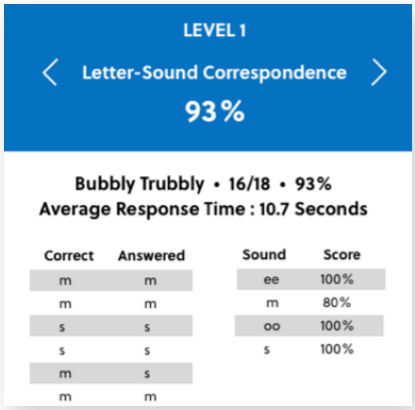
This table shows the average student score for every skill practiced in the last two phonological levels and last five ebooks. If there is no score shown, the skill was not recently practiced. Use the arrows to sort each column and group students by proficiency level.

Proficiency Ranges

- Learning
- Practicing
- Proficient

		Comprehension Skills							Phonological Skills							
		Current Book	Concept of Word	Sight Vocabulary	Recall: Picture & Text	Recall: Text Only	Sequencing: Picture & Text	Sequencing: Text Only	Current Level	Auditory Recognition	Alphabet Knowledge	Letter Sound Corr.	Identify Consonants	Identify Vowels	Identify Syllables	Blending
Adrian R	20	79%	81%	88%	–	–	–		5	70%	83%	58%	79%	73%	75%	43%
Chloe L	36	78%	77%	89%	–	–	–		7	82%	98%	68%	58%	78%	84%	86%
Ethan M	35	91%	87%	96%	–	–	–		8	83%	96%	72%	82%	77%	82%	63%
Jacob S	29	97%	91%	89%	–	–	–		7	76%	94%	84%	94%	75%	81%	58%
Jayden P	30	84%	82%	88%	–	–	–		5	64%	83%	40%	54%	73%	70%	35%
Keira T	28	98%	94%	100%	–	–	–		6	81%	85%	91%	68%	71%	83%	92%
Makayla C	23	52%	55%	63%	–	–	–		5	62%	64%	68%	36%	52%	64%	55%
Noah B	33	85%	86%	76%	–	–	–		7	81%	85%	81%	59%	73%	85%	62%

Proficiency report for a first-grade class



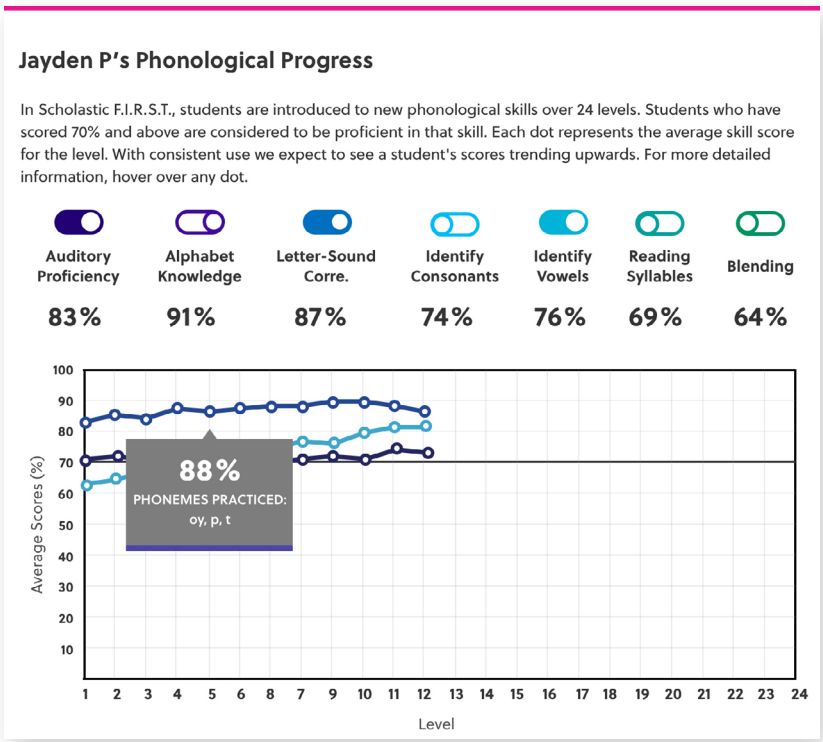
Accuracy analysis report for an individual student

Accuracy Analysis Reports

Accuracy analysis reports allow educators to track a student's average response time in identifying and manipulating phonemes across activity levels. This allows a teacher to see how a student's automaticity is improving with practice over time. Auditory processing speed is a good predictor of both reading and spelling abilities. Increasing speed with which students recognize individual sounds could improve their reading skills and abilities in the future.

Phonological Progress Reports

Detailed phonological progress reports isolate and monitor phonological progress and performance for each student over time. Each activity level builds on the previous one, with additional practice provided when a skill is not yet mastered. The ability to isolate specific skills helps educators assess when a student has achieved a breakthrough or requires additional support.

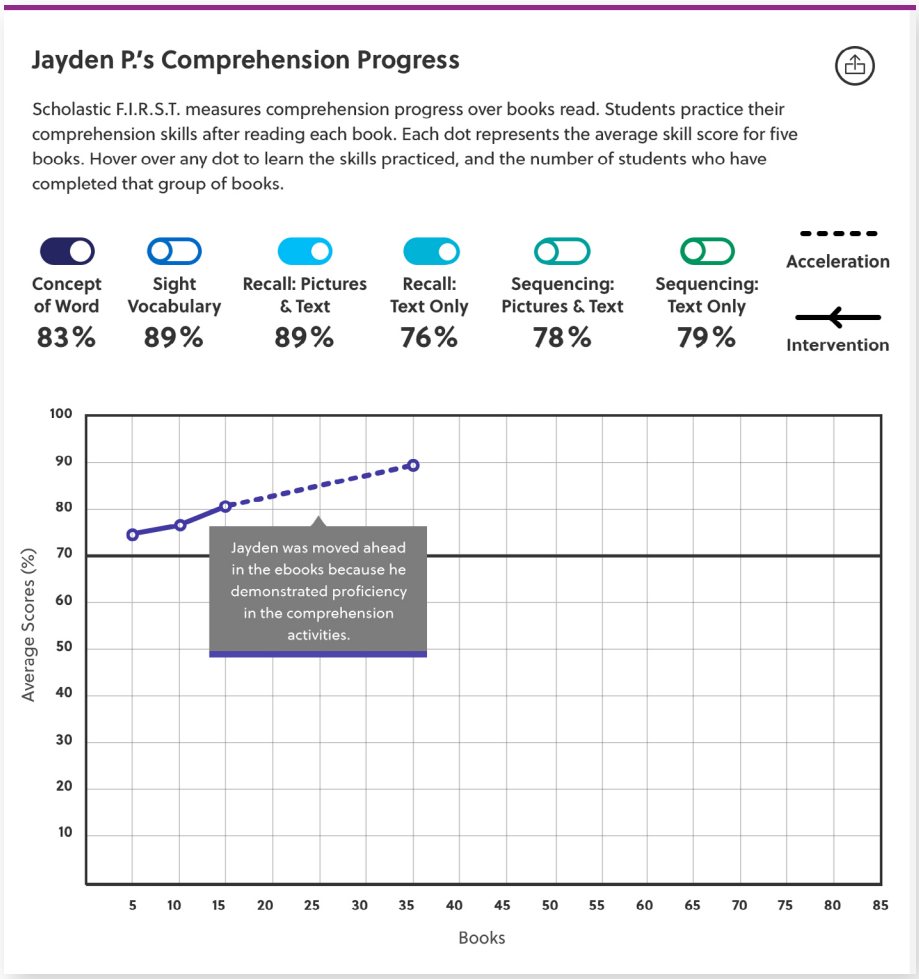


Student's phonological progress report

Comprehension Progress Reports

Comprehension progress reports allow educators to track how a student's comprehension skills are developing, and when they have received additional supports or accelerations in the F.I.R.S.T. ebooks. In F.I.R.S.T., a student reads each of the 85 ebooks twice with highlighting and supportive narration, followed by activities that develop their comprehension skills.

The Reading READirect analyzes students' skills and moves them ahead or back in the sequenced ebooks. Each dot on the graph represents the average skill score across five ebooks.

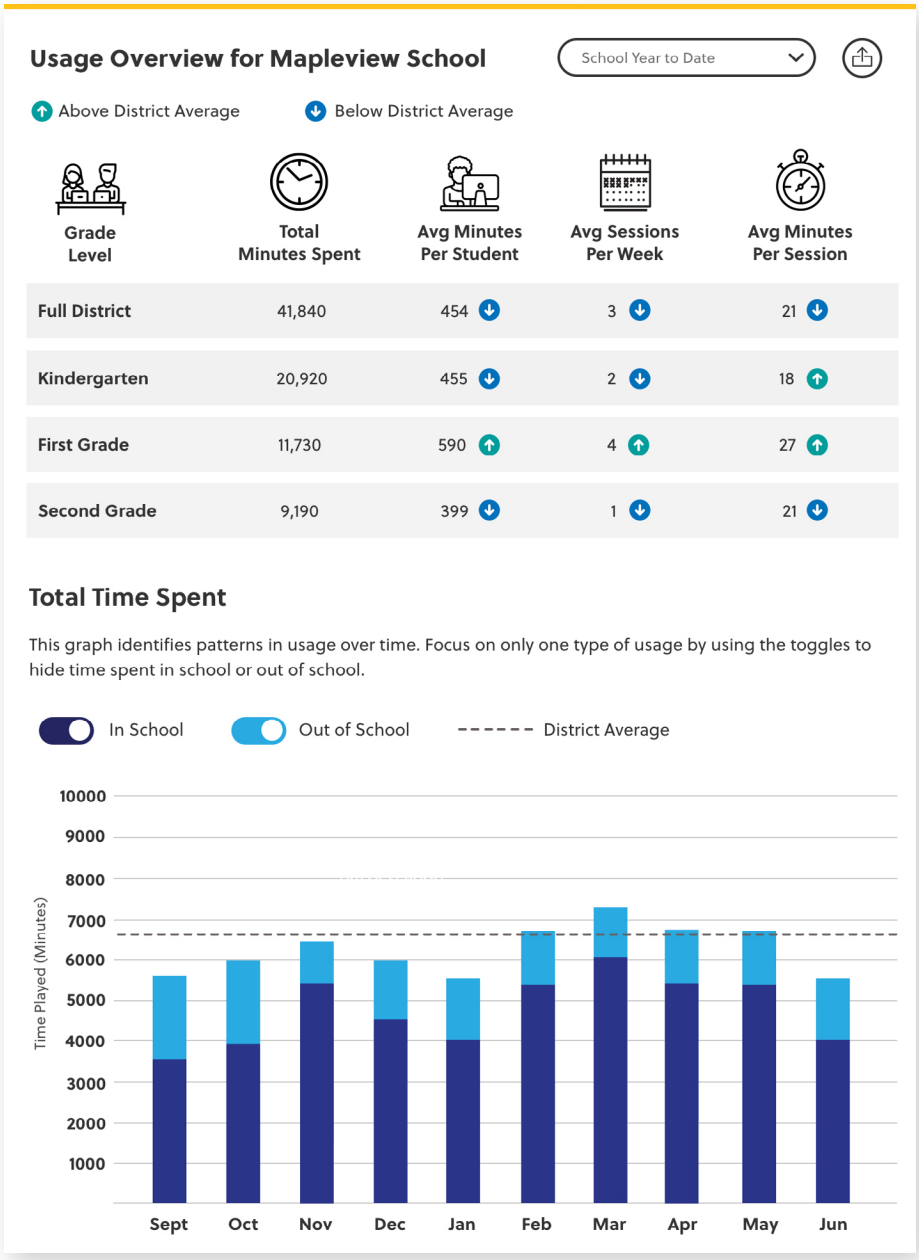


Student's comprehension progress report

Real-Time Usage Reports

Consistent practice is the key to learning outcomes. Educators and administrators can use real-time usage metrics to identify usage patterns and trends in order to gain insight into how F.I.R.S.T. is being used.

The usage overview highlights information such as total minutes spent using the program and average minutes per student or by session. It also tracks students' activity at home as well as in school, providing a comprehensive picture of where and when learning takes place.



School usage overview report

CONCLUSION

Research has shown that reading instruction based in oral language—that which prioritizes teaching students to identify sounds and letters with automaticity, and then to acquire deep understanding of the relationships between these sounds and letters—will help provide students with the knowledge, skills, and strategies they need to become confident readers.

Scholastic F.I.R.S.T. thoughtfully guides students in Grades PreK–2 in becoming fluent readers by teaching the National Reading Panel's recommended five foundational reading skills, with instruction around phonemic awareness and phonics, coupled with a strong emphasis on fluency, vocabulary, and comprehension. F.I.R.S.T. also provides ongoing formative assessment and detailed READirect information for individual learners, which fosters literacy development in a dynamic, supportive, and engaging learning environment.

REFERENCES

Anderson, R. C., Hiebert, E. F., Scott, J. A., & Wilkinson I. A. (1985). *Becoming a nation of readers: The report of the Commission on Reading.* The National Institute of Education.

Baker, L., & Brown, A. L. (1984). Metacognitive skills and reading. In D. Pearson, M. Kamil, R. Barr, & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 353–395). Longman.

Baker, S. K., Simmons, D. C., & Kameenui, E. J. (1995). Vocabulary acquisition: Research bases. In D. C. Simmons & E. J. Kameenui, (Eds.), *What reading research tells us about children with diverse learning needs* (pp. 183–218). Routledge.

Beck, I. L., & McKeown, M. G. (2007). Increasing young low-income children's oral vocabulary repertoires through rich and focused instruction. *The Elementary School Journal*, 107(3), 251–271.

Bishop, D. V. M., & Adams, C. (1990). A prospective study of the relationship between specific language impairment, phonological disorders and reading retardation. *Journal of Child Psychology and Psychiatry*, 31, 1027–1050.

Brett, A., Rothlein, L., & Hurley, M. (1996). Vocabulary acquisition from listening to stories and explanations of target words. *The Elementary School Journal*, 96(4), 415–422.

Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, 16(2), 234–248.

Fillmore, L. W., & Snow, C. E. (2000). What teachers need to know about language. In C. T. Adger, C. E. Snow, & D. Christian (Eds.), *What teachers need to know about language* (pp. 7–53). Delta Systems and Center for Applied Linguistics.

Foorman, B., Herrera, S., Petscher, Y., Mitchell, A., & Truckenmiller, A. (2015). The structure of oral language and reading and their relationship to comprehension in kindergarten through grade 2. *Reading and Writing: An Interdisciplinary Journal*, 28, 655–681.

Gambrell, L. B., Block, C. C., & Pressley, M. (2002). Improving comprehension instruction: An urgent priority. In C. C. Block, L. B. Gambrell, & M. Pressley (Eds.), *Improving comprehension instruction* (pp. 3–16). Jossey-Bass.

Gamse, B. C., Bloom, H. S., Kemple, J. J., & Jacob, R. T. (2008). *Reading First Impact Study: Interim report* (NCEE 2008–4016). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Gunning, T. G. (1996). *Creating reading instruction for all children.* Allyn & Bacon.

Hart, B., & Risley, T. R. (2003). The early catastrophe: The 30 million word gap by age 3. *American Educator*, 27(1), 4–9.

International Reading Association (1998). *Phonemic awareness and the teaching of reading: A position statement from the Board of Directors of the International Reading Association.*

Kim, J. S., Samson, J. F., Fitzgerald, R., & Hartry, A. (2010). A randomized experiment of a mixed-methods literacy intervention for struggling readers in grades 4–6: Effects on word reading efficiency, reading comprehension and vocabulary, and oral reading fluency. *Reading and Writing: An Interdisciplinary Journal*, 23(1), 1109–1129.

Lonigan, C. J., & Shanahan, T. (2009). *Developing early literacy: Report of the National Early Literacy Panel. Executive summary: A scientific synthesis of early literacy development and implications for intervention.* National Institute for Literacy.

Lundberg, I., Frost, J., & Petersen, O. P. (1988). Effects of an extensive program for stimulating phonological awareness in preschool children. *Reading Research Quarterly*, 263–284.

Mason, L. (2001). Introducing talk and writing for conceptual change: A classroom study. In L. Mason (Ed.), Instructional practices for conceptual change in science domains. *Learning and Instruction*, 11, 305–329.

Medo, M. A., & Ryder, R. (1993). The effects of vocabulary instruction on readers' ability to make causal connections. *Reading Research and Instruction,* 33(2), 119–134.

Moats, L. C. (2004). Efficacy of a structured, systematic language curriculum for adolescent poor readers. *Reading and Writing Quarterly*, 20(2), 145–159.

Murray, B. A. (2012). *Making sight words: Teaching word recognition from phoneme awareness to fluency: How to help children read words effortlessly without memorization.* Linus Publications.

Nagy, W. E., & Scott, J. A. (2000). Vocabulary processes. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of Reading Research*, 3, 269–284. Erlbaum.

National Institute of Child Health and Human Development (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4769). U.S. Government Printing Office.

Norton, E. S., & Wolf, M. (2012). Rapid automatized naming (RAN) and reading fluency: Implications for understanding and treatment of reading disabilities. *Annual Review of Psychology*, 63, 427–452.

Pikulski, J. J., & Chard, D. J. (2005). Fluency: Bridge between decoding and reading comprehension. *The Reading Teacher*, 58(6), 510–519.

Pressley, M., Beard El-Dinary, P., & Brown, R. (1992). Skilled and not-so-skilled reading: Good information processing and not-so-good information processing. In M. Pressley, K. Harris, & J. Guthrie (Eds.), *Promoting Academic Competence and Literacy in School* (pp. 91–127). Academic Press.

Rashotte, C. A., MacPhee, K., & Torgesen, J. K. (2001). The effectiveness of a group reading instruction program with poor readers in multiple grades. *Learning Disability Quarterly*, 24(2), 119–134.

Roskos, K. A., Tabors, P. O., & Lenhart, L. A. (2004). *Oral language and early literacy in preschool: Talking, reading, and writing.* International Reading Association.

Schleppegrell, M. (2001). Linguistic features of the language of schooling. *Linguistics and Education*, 12(4), 431–459.

Scliar-Cabral, L., Morais, J., Nepomuceno, L., & Kolinsky, R. (1997). The awareness of phonemes: So close-so far away. *International Journal of Psycholinguistics*, 13, 211–240.

Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children.* National Academy Press.

Steinbrink, C., Zimmer, K., Lachmann, T., Dirichs, M., & Kammer, T. (2014). Development of rapid temporal processing and its impact on literacy skills in primary school children. *Child Development*, 85(4), 1711–1726.

Tallal, P. (2012). Improving neural response to sound improves reading. *Proceedings of the National Academy of Sciences*, 109(41), 16406–16407.

Tankersley, K. (2003). *Threads of reading: strategies for literacy development.* Association for Supervision and Curriculum Development.

Wasik, B. H., & Newman, B. A. (2009). Teaching and learning to read. In O. A. Barbarin & B. H. Wasik (Eds.), *Handbook of child development and early education: Research to practice* (pp. 303–326), The Guilford Press.

Wolf, M., & Katzir-Cohen, T. (2001). Reading fluency and its intervention. *Scientific Studies of Reading*, 5(3), 211–239.

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Item #681717
5252-14 1/24