



© monkeybusinessimages/iStock/Getty Images

Research Base

Learning Design and Research Base for Foundations A–Z

TABLE OF CONTENTS

Why Foundational Skills?	1	High-Frequency Words	46
Becoming a Skilled Reader	1	The Research	46
Predictors of Reading Success	3	Foundations A–Z Research-Based Solutions	46
The High Cost of Reading Failure	5	Word Analysis (Word Study and Morphology)	48
The Science Behind Early Literacy	6	The Research	49
		Foundations A–Z Research-Based Solutions	50
The Foundations A–Z Literacy Solution	8	Language Connection	52
Research-Based, Intentional Early Literacy Instruction	8	The Research	52
A Continuum of Foundational Skills	9	Foundations A–Z Research-Based Solutions	52
Varied, Ongoing Assessments	10	Fluency	54
Educator Resources and Support	11	The Research	54
Home Support and Reinforcement	12	Foundations A–Z Research-Based Solutions	54
Optimizing Foundational Skills Instruction	13	Decodable Books and Beyond	58
		The Research	58
		Foundations A–Z Research-Based Solutions	58
Learning Design Principles	14	Reading and Listening to Complex Texts	61
The Science (and Art) of Reading Instruction	14	The Research	61
Systematic and Flexible Instruction	14	Foundations A–Z Research-Based Solutions	61
Using Analysis to Inform Instruction	16		
Building Content-Area Knowledge	18	Best Practice in Assessment	65
Culturally Responsive Teaching	21	Assessment Roles and Purposes	65
Culturally Responsive Tip	22	Assessment to Inform Instruction	66
Fostering Social-Emotional Learning	22	Student Self-Assessment, Metacognition, and Motivation	66
Differentiated Instruction for English Language Learners and Variant English Speakers	24	Teacher Observation and Developing Expertise	67
Multimodal Below-Level and Above-Level Support	28	Formal Unit Assessment, Reporting, and Follow-Up	67
		Assessment as a Growth and Accountability Measure	68
Building Reading Skills	31	Design of the Foundations A–Z Assessment Suite	69
Teaching the Foundations	31	Student Practice Interactivities:	
Print Concepts	31	Formative Assessment	69
The Research	31	Teacher Observation Checklist:	
Foundations A–Z Research-Based Solutions	32	Formative Assessment	71
Phonological Awareness	34	Formal Unit Tests: Formative and Summative Assessment	72
The Research	34	Interim Tests: Summative Assessment	73
Foundations A–Z Research-Based Solutions	34	Score Reports	74
Alphabetic Principle	37	Developmentally Appropriate Design and Format	75
The Research	37	So . . . Why Foundational Skills?	76
Foundations A–Z Research-Based Solutions	38	Acknowledgements	76
Phonics (Decoding and Encoding)	40	References	77
The Research	40		
Foundations A–Z Research-Based Solutions	41		

WHY FOUNDATIONAL SKILLS?



Every elementary teacher has witnessed the excitement and wonder of the young student who has just discovered they can decode a word and “read.” Often, this first ah-ha moment is followed in quick succession by other successful attempts to connect sound to letters; these young readers have “cracked the code” and are off, decoding words and lifting meaning from text. This moment might seem like magic—a sudden *poof* and they are readers. Yet researchers and experienced teachers know that this moment has been made possible by skills and knowledge that this student has been acquiring for some time. Awareness of these foundational skills also allows the teacher and researchers insight into what is happening for the students who have not yet cracked the code.

Becoming a Skilled Reader

To read skillfully, a student must engage in two distinct and simultaneous processes: word recognition and language comprehension. Both interact with one another during reading, yet each is supported by a unique set of understandings (see Figure 1). Word recognition requires decoding skills, including alphabet knowledge, phonological awareness, phoneme-grapheme associations, and sight recognition. Together, these skills drive decoding accuracy and fluency in novice readers (Adams, 1990; Lonigan et al., 2008; National Institute of Child Health and Human Development [NICHD], 2005; Storch & Whitehurst, 2002). With the right instructional guidance, decoding skills are generally learned early and entirely because they are finite (e.g., twenty-six letters and forty-four phonemes).

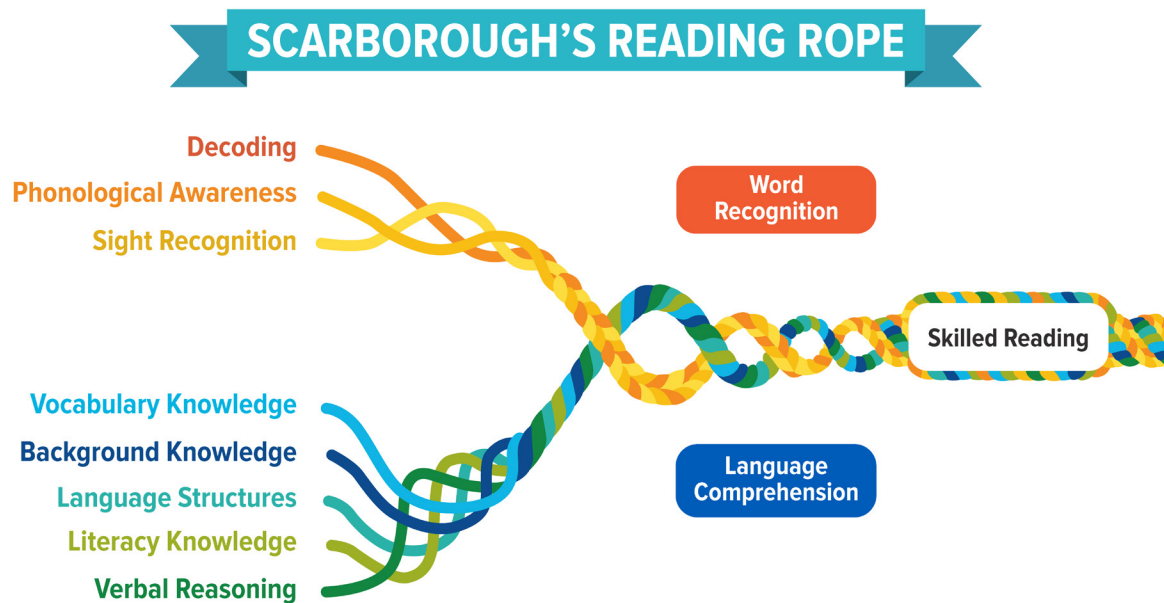
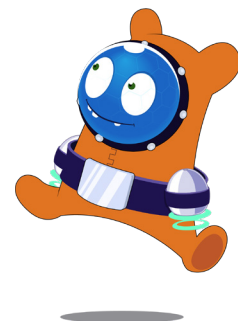


Figure 1. The interrelationship of evolving literacy skills is more clearly shown in *Scarborough's Reading Rope* (2001).

In the early phases of reading development, the reader's primary focus is word recognition. Comprehension is limited at this point because much of the reader's attention is devoted to translating letters into sounds, blending these sounds into recognizable words or word approximations (Adams, 1990; LaBerge & Samuels, 1974; Perfetti, 1985), and then connecting those written words to the spoken vocabulary in memory (phonological recoding; Share, 1995). Over time and with reading practice, specific grapheme-phoneme (letter-sound) relationships and some orthographic patterns (mental representation of word parts and patterns) are strengthened until they become over-learned, and students can recognize the word on sight without having to decode it each time (sight recognition). As a result, many words are recognized automatically (sight words; Ehri, 1995; Share, 1995).

While still engaged in word recognition, the reader also attempts to construct meaning (reading comprehension). To do this, the reader calls on language comprehension skills, including vocabulary, background knowledge, language structures, literacy knowledge, and reasoning. Language skills are critical to reading comprehension as students engage with increasingly complex texts (Duke et al., 2005; Juel, 2007; NICHD, 2005; Storch & Whitehurst, 2002). To keep up with the increasing demands of texts that students are required to read and comprehend, oral language and background knowledge must develop continuously.

Comprehension improves with increased word recognition automaticity because the reader is able to devote more attention to understanding the text as a whole, rather than focusing on decoding one word at a time (LaBerge & Samuels, 1974). The interrelationship of word recognition and language comprehension becomes more tightly woven as the student becomes an increasingly proficient reader.



Predictors of Reading Success

Precursors to skilled reading are explained in *Simple View of Reading* (Gough & Tunmer, 1986), which suggests reading comprehension includes both decoding and language comprehension (see Figure 2). According to Gough and Tunmer, if either process breaks down, comprehension cannot occur.

Word recognition skills (decoding) are foundational because they serve as the building blocks of literacy. In preschool and kindergarten, foundational skills such as alphabet knowledge and phonological awareness are indicators of subsequent word recognition ability in the first and second grades (NICHD, 2005; Storch & Whitehurst, 2002). Put simply, students with more developed alphabet knowledge and phonological awareness skills learn to read with greater ease when compared to students with lower alphabet knowledge and phonological awareness skills. Foundational skills are essential as readers progress, because without them, readers are more likely to struggle with unfamiliar and multisyllabic words they encounter in more complex texts.

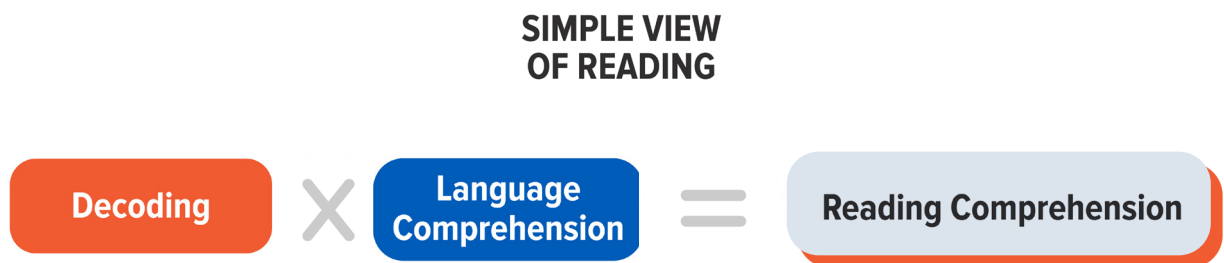


Figure 2. *Simple View of Reading* adapted from Gough and Tunmer (1986).

Language comprehension abilities, such as oral vocabulary, familiarity with print concepts, and use of language structures, are also essential to skilled reading. Longitudinal research on language comprehension has consistently shown a relationship between preschool oral language and reading comprehension in the elementary grades (Catts et al., 1999; Muter et al., 2004). Additionally, differences in language comprehension differentiate proficient from struggling readers (Catts et al., 1999).

Word recognition skills and a solid understanding of how language works must develop in tandem, as both are required for reading fluently and with comprehension. Gaps in either area of the pre-literacy landscape impede readers' ability to process text.

The Pre-Literacy Landscape

Word Recognition	Language Comprehension
<p>Alphabet knowledge includes letter-name knowledge, both upper- and lowercase, letter-sound associations, and the alphabetic principle (letters represent sounds in spoken words). Automaticity in identifying letters and sounds (naming speed) is also an important component in alphabet knowledge (Shanahan & Lonigan, 2010) and critical for rapidly decoding words.</p>	<p>Oral vocabulary is defined as the words one understands and uses when speaking and listening. Research has confirmed that the frequency and complexity of speech directed toward students is directly related to their oral vocabulary knowledge (Masek et al., 2018). Oral vocabulary is generally categorized at three levels that provide information about a student’s breadth and/or depth of word knowledge: receptive (the words in a student’s listening vocabulary), expressive (words in a student’s speaking vocabulary), and definitional (words with a depth of knowledge). Higher levels of oral vocabulary early on are related to later comprehension skills (Justice et al., 2013).</p>
<p>Phonological awareness (PA) is the understanding that speech can be broken down into parts and the subsequent ability to manipulate those parts at the word, syllable, onset-rime, and phoneme levels.</p> <p>PA, particularly at the phoneme level, has a direct role in the development of decoding and spelling. Graphemes (letters) represent phonemes (sounds) in written words. That is, phoneme-level awareness in conjunction with alphabet knowledge, enables students to understand how graphemes are mapped onto phonemes and blended to form spoken words (Adams, 1990; Share, 1995).</p>	<p>Print concepts include understanding that print is meaningful (i.e., carries a message) and purposeful (i.e., serves many functions, including entertaining, informing, etc.). Additionally, the forms of print (e.g., menu, story book, recipe) vary depending on the function. Early in development, readers rely on clues from the physical environment (e.g., store logo) and cannot read outside of these settings (Adams, 1990; Mason, 1980). As readers progress, they rely less on physical context and more on their developing code skills, including alphabet knowledge, the alphabetic principle, and print conventions (e.g., directionality, letters vs. words, punctuation).</p>
	<p>Language structures, including grammatical skill and syntax, develop rapidly in the early years and are highly sensitive to input (Huttenlocher et al., 2007). Put simply, students learn language and more complex language structures when they hear them. Conversely, they typically will not learn language and structures they are not exposed to.</p>

The High Cost of Reading Failure

Unlike oral language, reading proficiency doesn't evolve naturally for many students, and the consequences are high. Research shows that without appropriate intervention, students who do not read proficiently by the end of grade 2 are unlikely to catch up (Juel, 1988; Stanovich, 1984; Juel et al., 1986; Olson et al., 2014; Sparks et al., 2014) and have a high probability of continuing to struggle throughout elementary school and beyond.

The gap between high- and low-achieving readers continues to grow with each successive grade. Juel (1988, 445) identified low levels of phonemic awareness, weak decoding skill, and limited print exposure as all contributing to a “steadily widening gulf” between good and poor readers. Likewise, Stanovich (1984, 393) agreed with Juel's findings that problems “in the area of phonological awareness” can cause “delays in early code-breaking progress and initiates the cascade of interacting achievement failures and motivational problems.”

Motivation and engagement, though often overlooked in discussions of word recognition, are also critical to skilled reading. Within the domain of word recognition, motivation functions alongside executive functioning skills, such as attentional control, working memory, and planning, prompting the reader to put forth the effort required to coordinate the complex processes of decoding words not immediately recognized and identifying known words (Duke & Cartwright, 2021). Factors that contribute to motivation and engagement include a reader's purposes and goals of reading (Guthrie & Humenick, 2004). A reader who wants to read a particular text is often able to apply executive functioning skills (e.g., planning, working memory, attentional control) that result in greater reading success than might be evident when the reader is faced with a similar text that does not incite the same level of interest and engagement (Duke & Cartwright, 2021).

Motivation is also linked to reading achievement. Whereas high-achieving readers are motivated to read, struggling readers are motivated to read less, and as a result, encounter and are able to read fewer words (Juel, 1988; Cunningham & Stanovich, 1990). Estimates of words read by high- and low-achieving readers showed “staggering individual differences in volume of language experience, and therefore, opportunity to learn new words” (Nagy & Anderson, 1984, 328).

The long-term ramifications of poor reading proficiency are well-known. Longitudinal studies report that a lack of basic reading skills has profound implications for later school success and, subsequently, adult life. Students unable to read well by the end of grade 3 are more likely to drop out of school, experience higher levels of unemployment, and engage with the criminal justice system (Hernandez, 2011). It is not exaggerating to say that poor literacy has far-reaching effects on individuals and society as a whole (see Figure 3).

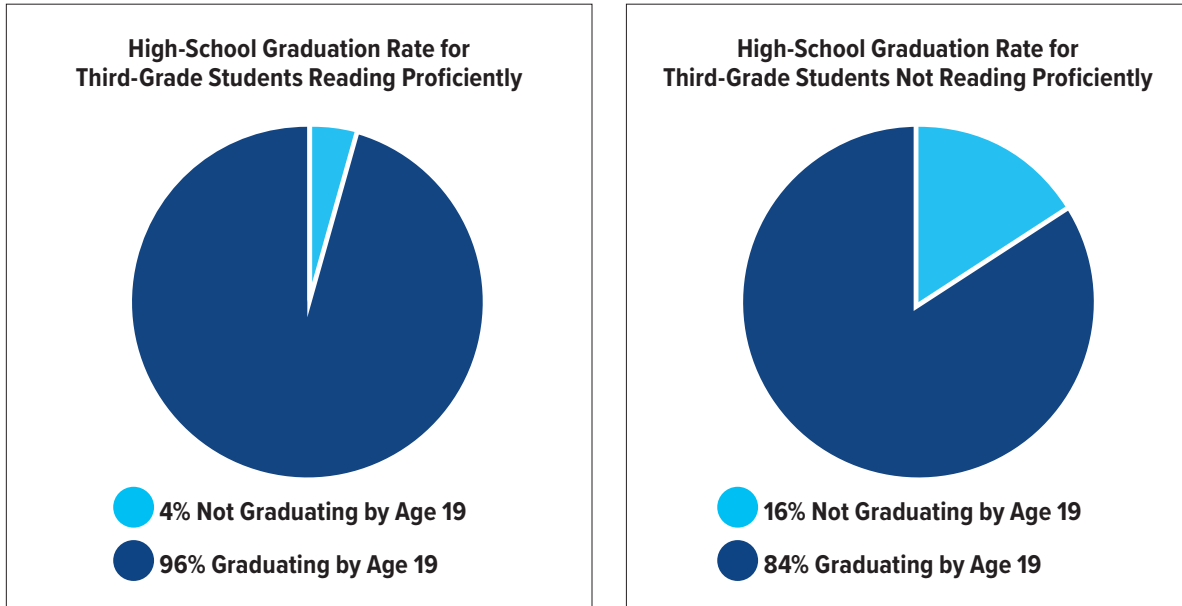


Figure 3. Chart based on data from *Double jeopardy: How third-grade reading skills and poverty influence high school graduation* (Hernandez, 2011) and *Reading on Grade Level in Third Grade: How Is It Related to High School Performance and College Enrollment?* (Lesnick et al., 2010)

The Science Behind Early Literacy

There have been new findings, thanks to neuroscience and cognitive science, on what the brain actually does when people read. One of the findings comes from studies of eye movements while reading (Snell & Theeuwes, 2020; Reilly & Radach, 2003). Reading is accomplished with letter-by-letter processing of the word (Rayner et al., 2001). In other words, reading requires the ability to match the symbols that make up written words with the speech sounds that those symbols represent.

In addition, cognitive neuroscientists have noted a consistent and universal pattern of activity connecting the phonological processor in the brain's front left side to the orthographic processor at the rear as reading takes place. The bridge between those two areas, the phonological assembly, is what connects written letters to sounds and makes reading possible (Sandak et al., 2004; Houdé et al., 2010). Major regions of the left brain perform specific jobs in concert with other regions of the brain for one to be able to read.

Much as physical training develops muscles and improves athletic performance, deliberate practice in phonemic awareness and letter-sound knowledge strengthens neural pathways crucial for processing text. Explicit instruction develops the alphabetic principle (i.e., print-sound connection) and leads to efficient orthographic mapping, which lets readers automatically process words effortlessly, using deeply ingrained phonological knowledge (Kilpatrick, 2015; Rasinski, 2020). This automaticity is a key stepping-stone to fluency and, ultimately, comprehension, because it frees up cognitive resources the reader can then put toward comprehension (LaBerge & Samuels, 1974).

Likewise, developing an understanding of the rules of language occurs over time and in stages, beginning at a very young age with listening comprehension. Learning how to apply the rules of language is an ongoing process that continues well into the school years. Developmental psychologists generally agree that the basic rules of spoken language are acquired naturally by young children through exposure to speaking adults and the brain's disposition to oral language development. However, language rules that apply to visual forms (text) must be systematically and explicitly taught (Foorman et al., 1998; Liberman et al., 1989). The rules governing spoken language that were acquired naturally must now be broken down and explained in order for students to understand how they work with the visual representation of language. With novice readers, this must occur in tandem with decoding instruction, since both decoding and language comprehension are required for fluent reading (Gough & Tunmer, 1986).



THE FOUNDATIONS A-Z LITERACY SOLUTION



© FatCamera/E+/Getty Images

Research-Based, Intentional Early Literacy Instruction

Research supports the design and implementation of early literacy programs rooted in systematic instruction and deliberate practice of essential literacy elements. Such programs need not be formulaic. Practitioners know that effective instruction relies on teacher ingenuity and instructional craft to address students' needs. All of these considerations factored into the development of the Foundations A–Z literacy solution.

An artfully designed program melds instructional best practice to research-based evidence. Rather than addressing key skills in isolation, for example, an effective program intentionally interweaves multiple components of early literacy instruction into a single lesson (Moats, 2007). Employing a gradual release approach—in which explicit instruction gives way to guided practice and then to independent application of skills by students—provides scaffolded support using repetition (Pearson & Duke, 2002). Granting teachers the flexibility to give corrective feedback, engage students in guided practice, and use reteach and enrichment activities, allows for customized lessons that address individual student needs within the program structure (Snow et al., 1998).

A Continuum of Foundational Skills

Developed by educators and based on scientific reading research, the Foundations A–Z literacy program is unique in that it offers explicit, systematic, cumulative foundational skills instruction from kindergarten through grade 5. The grade-level scope and sequences present a continuum of foundational skills aligned to national and state standards. They start with the simple alphabetic phase, move to the spelling-pattern phase, and culminate with the more sophisticated polysyllabic and morphemic phase. Instruction starts with simple foundational skills and progresses to more complex skills that build on each other. Instruction begins with grade-level texts that offer ample opportunities for repeated readings and fluency practice, as well as vehicles for building content-area knowledge (Stanovich, 1984; Rasinski, 2019). Teacher-led and peer-to-peer collaborative learning helps students hone skills and deepen understanding (Driver et al., 2000; Pappas et al., 2002). Teachers gather ongoing observational data within each lesson, allowing them to respond to students’ needs with differentiated instruction (Duke & Mesmer, 2019).

The oft-neglected third phase of reading development, the polysyllabic-morphemic phase, is the focus of instruction starting in grade 3 (Adams, 1990; Shefelbine, 1990). Higher-level instruction on morphemes, syllable types, division rules, and implications of the schwa sound are built into well-integrated lessons. Engaging books and word study passages are presented in a variety of genres and include more challenging, multisyllable content-area words. These conceptually rich and grade-appropriate texts lend themselves to repeated readings as a means to advance fluency and expand knowledge (Rasinski, 2020; Cervetti & Hiebert, 2015). Meaningful activities that support learning by both engaging students and helping teachers ply their craft in creative and purposeful ways.

The chart below shows the progression and spiral review of critical skills across grade levels in the Foundations A–Z program.

Foundations A–Z Scope and Sequence Overview						
	K	1	2	3	4	5
Phonological Awareness	•	•				
Phonics	•	•	•	•	•	•
Phonograms	•	•	•			
Print Concepts	•	•				
High-Frequency Words	•	•	•	•	•	•
Content Area Vocabulary				•	•	•
Handwriting (manuscript)	•	•	•			
Handwriting (cursive)			•	•	•	•
Fluency	•	•	•	•	•	•
Language Connection	•	•	•	•	•	•
Word Study			•	•	•	•

Varied, Ongoing Assessments

Assessment is a key component of the program. Interactive unit tests along with teacher observation checklists provide formative data on individual student performance. Individual, real-time student data enables teachers to respond in an effective and timely manner to student needs (Snow et al., 1998). Interim summative assessments are administered three times per year to gain a broader view of student and class performance according to grade-level standards.

Foundations A–Z assessments not only ensure that students have multiple avenues to demonstrate success, but also provide teachers with data on all aspects of student learning. The different assessment opportunities shown below inform and strengthen instructional practice throughout the program.


Foundations A–Z Assessment Components		
Ongoing Formative Assessment	Implementation Frequency	Description
Observation Checklists (digital and print formats)	Daily (within the lesson plans)	Observation checklists are a formative assessment embedded in each lesson. Recorded observations help teachers tailor instruction so all students receive reteach and/or enrichment opportunities based on their performance on lesson activities.
Practice Interactivities (digital format only)	Daily (within the lesson plans)	These are interactive online practice activities for students. Students watch a video that reviews skills, strategies, and/or concepts. Interactivities follow the video and require students to apply what they learned in the video. Results are available for teacher review and, like the observation checklists, help teachers tailor reteach or enrichment activities based on student performance.
Unit Assessments (digital and print formats)	Eight times per year, at the completion of each lesson plan unit of study	Unit assessments assess students' knowledge of the skills taught within the unit of study.
Formal Summative Assessment	Implementation Frequency	Description
Interim Assessments (digital and print formats)	Three times per year, at the beginning of the year, middle of the year (post Unit 4), and end of the year (post Unit 8)	Interim assessments evaluate (or measure) students' knowledge of core skills taught throughout the program and progress toward meeting grade-level standards.

Home Support and Reinforcement

A strong home-school connection is essential to students' overall success in literacy. Studies show a direct correlation between caregiver involvement in what students are learning and student motivation (Clark, 2007; Englund et al., 2004). When students associate caregiver involvement and encouragement with what's being taught in the classroom, they are more likely to achieve proficiency and success.

Foundations A–Z understands the importance of keeping caregivers informed about learning happening in the classroom. Each grade level includes one caregiver letter per unit. Each letter explains what students will learn and offers quick activities families can do together to support learning at school. Teachers simply print the letter and send it home at the start of each unit or email the digital version directly to caregivers.

Foundations A-Z
Caregiver Letter
Grade 1 - Unit 1



Partnership between schools and caregivers is essential for your child's education.
As a caregiver, you are an important resource. Your continuing support of literacy development throughout elementary school has positive effects on your child's reading ability. These tips provide information and ideas to help extend foundational learning at home.

Unit Summary
In this unit, your child will review some of the skills taught in kindergarten, including identifying consonants and vowels and reading words made up of a consonant, a vowel, and a consonant.

Module Skills and Connected Text

Module 1: Review consonant letters and vowels, with a focus on short vowel sounds and "hard" consonant sounds, such as *f, x, c, g, qu, s,* and *y*. Read words made up of a consonant, a vowel, and a consonant. Read words with the phonograms, or word families, -*on*, -*um*, -*ed*, -*in*, and -*og*.
Connected Text: *Red High-Frequency Words: box, dog, its, name, here.*

Module 2: Review closed syllables and the consonant digraphs *sh, th, wh, ph,* and *ch*, such as in *hush, train, when, graph, and chip*. Read words made up of a consonant, a vowel, and a consonant and words made up of a vowel, a consonant, and a silent *e*, such as *ice*. Review the spelling rule when consonants are doubled, as in *doll*. Read words with the phonograms, or word families, -*ock*, -*oke*, and -*ipe*.
Connected Text: *Cut, Book or Write High-Frequency Words: odd, called, sets, one, once.*

Module 3: Learn the *s*-blends *st, sp, sk, sn, sm,* and *sw*, such as *step, spot, skate, snake, smile,* and *swim*. Review what a closed syllable is. Read words with the phonograms, or word families, -*ing*, -*ill*, and -*ed*.
Connected Text: *At the Park High-Frequency Words: rest, step, still, stop.*

Module 4: Review skills and phonograms from earlier in the unit.
Connected Text: *Back Street Car Show High-Frequency Words: review all words listed above.*

Caregiver Tips for the Unit

- Hear and recognize that words are made up of sounds:** Help your child orally break apart and isolate the sounds in words with the digraphs *sh, th, wh, ph,* and *ch* and the *s*-blends *st, sp, sk, sn, sm,* and *sw*. Have your child identify these sounds in words like *ship, spin, sweet, train, wheel, that,* and *prize*.
- Look for and play games with patterns:** Practice counting syllables with your child. Say a word. Ask your child to repeat the word. Clap the number of syllables, and tell how many syllables it has. Then have your child tell you a word to repeat, clap the number of syllables, and tell how many syllables it has.
- Practice skills in connected text:** Each module will include a decodable book that focuses on the module skills and high-frequency words for you to read to your child, or to read together. Ask your child to point to and/or highlight words in the book that include the phonetic patterns and high-frequency words.
- Practice high-frequency words:** Using the unit high-frequency word flash cards, practice reading and writing the words with your child.

Learning A-Z
www.learning-a-z.com



© MoMo Productions/DigitalVision/Getty Images

Optimizing Foundational Skills Instruction

Research shows that in addition to strong leadership and teacher dedication, student achievement requires a combination of effective scheduling, professional development, scientifically based intervention programs, parent involvement, and data utilization and analysis (Crawford & Torgesen, 2006). The Foundations A–Z solution incorporates all of those elements to provide an informed, carefully designed learning path that supports student literacy (see Figure 4).

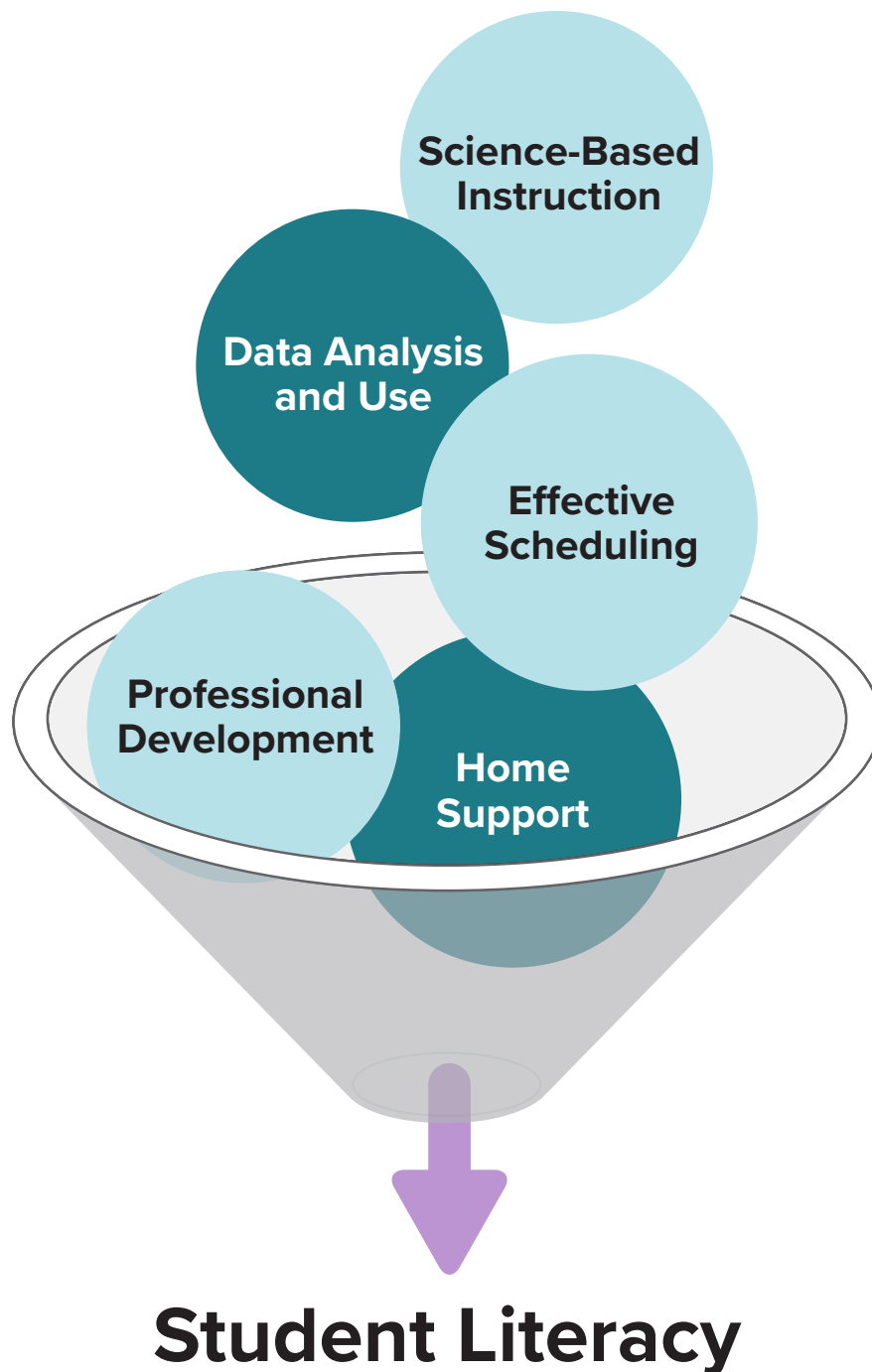


Figure 4. Designed path that supports student literacy

LEARNING DESIGN PRINCIPLES

The Science (and Art) of Reading Instruction

Although science informs what students need to learn, it does not mandate an exclusive route to desired learning outcomes. Foundations A–Z adheres to scientifically-based reading research without constraining teachers from exercising their creativity or forcing students to march in lockstep. The program was created to incorporate the following underlying principles:

- Explicit, research-based instruction
- Systematic scope and sequence
- Emphasis on phoneme-level instruction under the phonological awareness umbrella
- Instructional routines to practice foundational skills
- Spiral review to foster mastery of foundational skills
- Application of reading and writing skills using connected text in grades K–5 and writing connection
- Differentiated instruction with reteach and enrich opportunities
- Engaging instruction with a digital experience for students

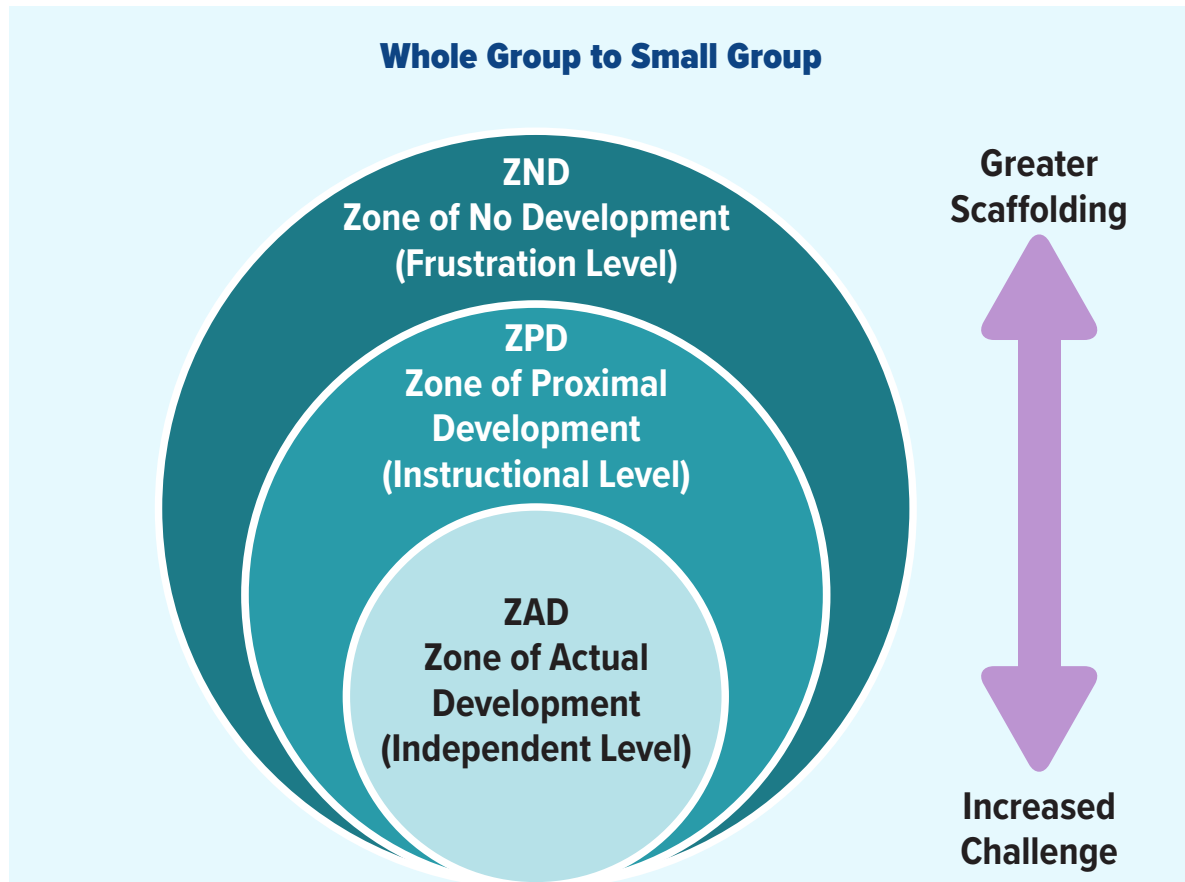
By providing a systematic and explicit framework of instruction that embraces the teachable moment, Foundations A–Z helps bring the scientific reading research and the art of teaching to the classroom, which serves as a launchpad for overall academic success.

Systematic and Flexible Instruction

Foundations A–Z’s systematic yet flexible lessons allow for optimal reading instruction and learning, ensuring consistency and the flexibility for teachers to apply routines where they are needed most. Lessons follow a systematic approach, going from simple to more complex while allowing flexibility. Foundations A–Z lessons use scaffolded instruction that follows a gradual release model in which explicit instruction gives way to guided practice, followed by the independent application of skills by students. Repetition provides scaffolded support (Pearson & Duke, 2002).



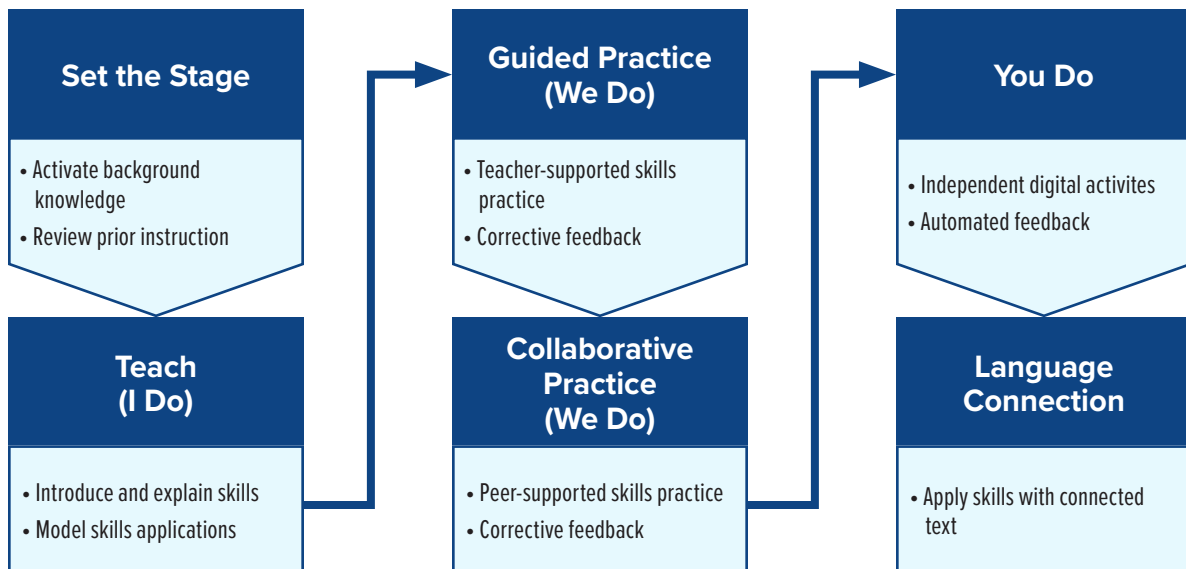
The scaffolded approach used in Foundations A–Z lessons provides teachers with significant flexibility with core elements, which can be taught in whole-class instruction followed by small groups as needed. There are instances in which whole-group instruction means longer and more productive time on task. Capitalizing on the unique learning opportunities presented in a richly diverse, heterogeneous classroom, whole-class application includes activities that allow students to learn from each other as they engage with grade-level texts. Together, teacher and peer support may facilitate better understanding.



Based on *Understanding cooperative learning through Vygotsky's zone of proximal development* (Doolittle, 1995)

Established learning theory has shown that students gain the most from instruction centered on their current ability with opportunities to stretch—with support. Whole-group instruction is a great starting point, allowing teachers to leverage academic diversity to support student learning within their zone of proximal development (Vygotsky, 1978). The concept of zones of proximal development has implications for instruction. The level of instruction that is too difficult should be balanced with proficiency level. This ensures that instruction is neither too difficult nor too easy.

We know that Vygotsky's zones of proximal development fluctuate as students gain mastery and engage with more challenging material. Learning needs are fluid; students who have been cruising along easily may suddenly hit a speed bump. Because of this, a scaffolded, gradual-release format offers the best opportunity for customized small-group instruction to support struggling learners.



Foundations A–Z gradual release lesson plan model

Explicit instruction and modeling presented in “I Do” transitions to Guided Practice, or “We Do.” This is where teachers and students work together to make corrections. Collaborative activities encourage and motivate students as they practice the skills.

Between the “We Do” and the “You Do” segments is a collaborative piece where students work with their peers. This allows for more heterogeneous grouping, such as pairing students who are just learning a skill with those who have mastered it and can provide support. Students participate in paired reading, discussion, and collaborative practice, all integral parts of foundational skills instruction. These activities equalize the participation of all learners and help students develop social-emotional skills, including social awareness and relationship skills. All of these activities foster the development of speaking proficiency, general knowledge, and a robust vocabulary.

Using Analysis to Inform Instruction

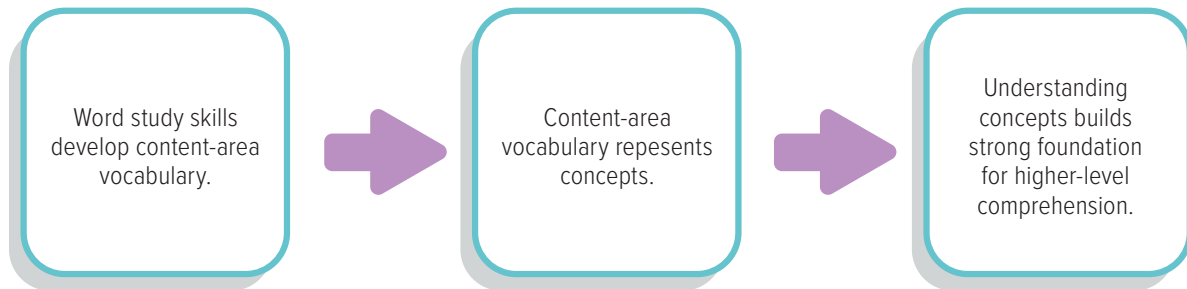
The gradual release model followed in the Foundations A–Z program includes ample opportunities for formative assessment via observation and embedded check points. Immediate corrective feedback based on teacher observation and independent student performance informs the use of systematic instructional routines as part of targeted small-group review. Robust review lessons are used to reteach and reinforce key concepts for below-level students who continue to struggle.

Students who have mastered key skills also gain support through scaffolded reteach instructional routines. Because these students have achieved target proficiency and are ready to move on, Foundations A–Z lessons include more challenging enrichment activities to prevent boredom and accelerate growth.

Building Content-Area Knowledge

Foundations A–Z program developers recognize that the ultimate goal of foundational skills instruction is not to produce phonics wizards, rather it is “to get students to the point where most of the words they encounter are automatically recognized so that their attention can be devoted to making meaning” (Rasinski, 2019). Sound instruction is predicated on the understanding that students’ ability to quickly recognize or decode words is key to acquiring knowledge about the world in which they live. That world includes disciplines such as mathematics, science, social studies, and the arts.

Word study that includes academic language and discipline-specific morphemic analysis reaps enormous benefits. Understanding the meaning of a single Greek or Latin root, for example, unlocks the meaning of everyday and content-area vocabulary (Rasinski, 2020). Studies demonstrate that students with a richer vocabulary or topic knowledge perform significantly better on reading comprehension measures compared to students with a poorer vocabulary or topic knowledge, even if the former have lower foundational reading skills (Wexler, 2020). Not only does well-rounded topic knowledge affect students’ assessment outcomes, it also prepares students for academic and career success.



Vocabulary’s role in building comprehension

Students should be provided daily practice with newly acquired skills by engaging with different texts on a single topic. Varied and robust texts should be at the heart of each lesson in order to provide “wide reading” opportunities for students to gain fluency and automaticity while building knowledge across the content areas (Cervetti & Heibert, 2015).

Recent studies tout the benefits of curricular integration, even at the primary grades (Duke et al., 2021). Students gain a deeper understanding of the material and link what they are learning in the classroom to real-world experiences. Classroom lessons that incorporate integrated curriculum are often effective alternatives to the traditional subject-by-subject curriculum.

Foundations A–Z does not approach foundational skills proficiency and knowledge building as discrete benchmarks achieved in isolation. The program’s lessons are based on current best practice that eschews the old model of learning to read, then reading to learn. Instead, it incorporates robust, varied texts on grade-appropriate content areas as part of foundational skills instruction.

Building background knowledge occurs in conjunction with the acquisition of foundational skills. Foundations A–Z lessons enable teachers to touch on multiple standards across different subject areas in one lesson, maximizing the use of precious instructional time.

At grades K–2, students build knowledge primarily through exposure to content-rich texts read as part of foundational skills lessons. The first lesson in each module begins with introducing the module question and/or a skill or strategy taught or reinforced in the body of the lesson. Instruction on topic-specific vocabulary that may be unfamiliar to younger students is provided. Practicing decoding skills in context supports purposeful reading and develops the connection between words and meaning in various academic disciplines.

Referencing the module question during subsequent informal discussions of the texts helps strengthen students’ corpus of knowledge on that topic.

Sample Shared Reader, Grade K

Associated Lesson Plan



We care for Earth
in many ways.
Our care can make
a big difference.

12

Engaging, readable texts

Print Concepts: Shared Reader: *Caring for Earth*

3 mins

1. **Display** the shared reader [Shared reader: *Caring for Earth*](#) again and remind students of one-to-one correspondence.

✓ [Sample Dialogue](#)

When we just reread this text, we were making sure to point to each word as we read. It is important to make sure you point to each word as we read them out loud. This helps us focus on each word as we read.

2. **Reread** page 12 to students. Have students find words in the [Shared reader: *Caring for Earth*](#) that have the letters *Mm*, *li*, or *Tt* in them. Remind students that words are made up of letters, and it is important to look at the letters in each word as we are trying to read them. Guide students to point out the word it and name the letters in the word.

✓ [Sample Dialogue](#)

Let’s look at the words on this page and find any words with the letters *Mm*, *li*, and *Tt* in them. Remember, all the words we read are made up of letters. Who can help us find one of the letters we are learning about this week? (Call on volunteers to find the letters in the words.) I see the word it too! It starts with a letter we learned about this week, *i*. Let’s all point to the word *it*. This word is spelled with two letters. Watch as I point to each letter and say the letter’s name, *i*, *t*. Try it with me! Point to each letter that spells it and say the letter names with me; *i*, *t*.

3. **Collaborative Practice:** Have pairs of students point to the word *many* on page 12 and read the word aloud. Have students point to each letter and tell their partner how many letters are in the word. Then have students tell their partner what letter the word starts with.

Check for Understanding

1 - Print Concepts

I can point to each word being read aloud.

2 - Print Concepts

I can point to the letters in words and identify them as letters.

Observe students as you read and record in the

[Observation checklist for Unit 1, Module 2, Lesson 4.](#)

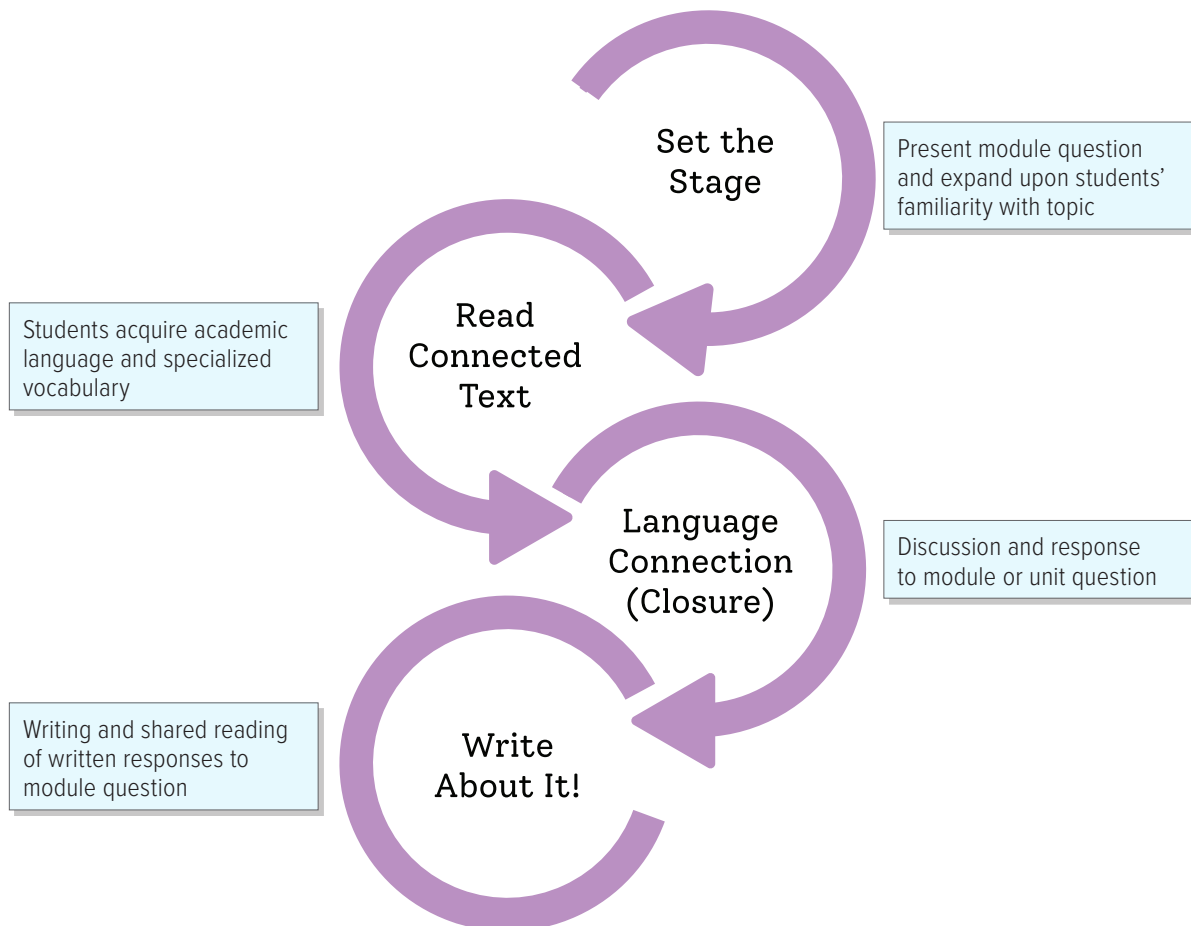
**See Reteach/Enrich section for follow-up activities if needed.

Lessons not only include explicit instruction in foundational skills via the sample dialogue, they also allow for opportunities throughout to build knowledge of topics simultaneously.

At grades 3–5, lesson structure mirrors the increased breadth and depth of content students encounter across all curricular areas in those grades. Phonics and word study activities, such as spelling and morphemic and context analysis, help students acquire academic language and specialized vocabulary, and fluency activities use content-area text with target vocabulary as well. Educators know that to master a content area “is to learn its key concepts, that is, its language” (Dale, 1975, 12).

Foundations A–Z texts and lessons engage students in listening, speaking, and writing activities with knowledge building as the instructional focus. Research shows that giving students regular opportunities to participate in teacher-led and peer-to-peer discussions of rich texts as they engage in higher-level tasks deepens their knowledge base and comprehension (Driver et al., 2000; Pappas et al., 2002).

Writing, especially collaborative writing, is a highly effective tool for accruing and retaining knowledge (Wittrock, 1983).



Culturally Responsive Teaching

To learn, students must be able to engage personally with instruction. Culturally responsive teaching recognizes the importance of including students' cultural references in all aspects of learning (Ladson-Billings, 1994). The pedagogy is effective because it makes meaningful connections among the cultural identities, experiences, and perspectives of diverse students. These methods work to affirm and celebrate diversity, creating a sense of community that invites deeper engagement with the curriculum.

Cultural responsiveness begins when a teacher acknowledges and values students' diverse identities and also recognizes he or she might not always be the cultural expert. Collaborative learning in which teachers turn the tables to allow students to be the teacher is an effective strategy that lets students question, challenge, and add to the learning by sharing their lived experience. Selecting informative and varied texts enriches classroom discussion by building on students' background knowledge and creating opportunities for sharing.

Foundations A–Z offers texts that reflect cultural diversity in topics, characters, and settings, giving students the opportunity to see their own cultures valued while appreciating those of others. Likewise, the module and unit questions are designed to be relevant to the experiences of a diverse student population. The program provides numerous tips that demonstrate how teachers can present inclusive and effective lessons. Teachers can help students connect to the experiences of others by asking questions that make the topic more relevant to their own experiences. When texts reveal cultural differences, it is important to emphasize the positive aspects of such differences while pointing out commonalities. For example, family structures might differ, but family is important in all cultures.

Foundations A–Z maximizes opportunities for students to share aspects of their culture by providing practical suggestions for teachers. Teacher tips are interspersed throughout module lessons. If students speak more than one language, Foundations A–Z includes suggestions to invite them to share vocabulary from their primary language (without putting them on the spot). If students recognize roots in English words that are familiar from their primary language, they are encouraged to point this out. If students have lived in a place featured in a text, that is a great opportunity to invite them to share their knowledge of that place.

Culturally Responsive Tip

Foundations A–Z instructional designers recognize that “both teaching and learning are naturally cultural, and difference is inherent to the human condition” (Gay, 2018, xxxi). Instruction that makes learning relevant and accessible to all is simply “good teaching” that serves students and society.



Culturally Responsive Tip

Anansi stories have traveled across oceans and have been translated into different languages. It is important to keep in mind that folklore changes over the years and often depends on who is retelling the story. Remind students that stories tell us only a little bit about a culture, and that they should learn about cultures through a variety of sources.



Culturally Responsive Tip

As you discuss the term culture, invite students to talk about aspects of their own culture or cultures, including food, language, and dress. Note that different customs or traditions make them special, but there are also many similarities among cultures. Point out that many people belong to more than one culture.

Tips in Foundations A–Z lesson plans point out culturally responsive teaching opportunities, such as this tip for the discussion of an Anansi tale, and for the discussion of a text about cultures around the world.

Fostering Social-Emotional Learning

Often considered the “hidden curriculum,” social-emotional learning (SEL) skills are interrelated cognitive, emotional, and behavioral competencies essential to students’ social, emotional, and academic development. Opportunities for personal growth in these areas are usually buried (or hidden) within the formal curriculum, yet in many ways, they are just as important as explicit instruction in grade-level content. Success in and out of the classroom involves students learning to demonstrate concern for others, make good choices, and become responsible for their behaviors.



© skynesher/E+/Getty Images

There is growing advocacy for the inclusion of interpersonal and intrapersonal skill instruction that is key to supporting students’ overall development (Pellegrino & Hilton, 2012). A growing body of evidence demonstrates that SEL skills are particularly relevant for K–5 learners (Durlak et al., 2011). Indeed, it is believed that SEL skills are promoted in the classroom to improve students’ academic achievement as well as their social skills.

To support the development of these lifelong skills, the Foundations A–Z program makes the “hidden curriculum” less so. Each module includes explicit instructional tips aligned to SEL competencies outlined by The Collaborative for Academic, Social, and Emotional Learning (CASEL, n. d.). Teacher tips embedded in lessons encourage collaboration, mutual respect, and teamwork and also highlight realistic, authentic opportunities for students to practice and develop social-emotional skills.

How FAZ Lessons Help Students Develop SEL Skills

CASEL Competencies

FAZ SEL Teacher Tips

Self-awareness: Understand and manage emotions



Responding to texts and module and unit questions: The themes and topics of many of the texts and the module and unit questions offer opportunities for students to consider issues related to both social and self-awareness.

Self-management: Manage thoughts and feelings in a productive manner; set and achieve positive goals
Responsible decision-making: Behave in a responsible way, considering the benefits and the consequences of one’s actions, for the sake of one’s self and for the sake of others



Challenging skills and concepts: Celebrate students’ effort as well as their progress. Students should understand the value of their hard work (productive struggle), regardless of whether it produces immediate, obvious progress—mistakes are useful steps in the learning process. When encouraging students to try again, point out that it is not productive to persist with a strategy that is not working. Stress the importance of being flexible and trying different methods.

Social awareness: Feel and show empathy; understand others’ perspectives



Giving feedback: When students work with partners, they should feel comfortable giving their partners feedback about what they are doing well and what they might need to work on. Model how to give feedback in a way that is supportive, honest, and respectful.

Relationship skills: Establish and maintain positive relationships



Discussion and collaborative work: Applying the rules of respectful discussion, such as active listening and taking turns speaking, helps students improve their self-awareness and relationship skills. Shared writing and other collaborative activities also offer opportunities for students to improve these skills.

Another important SEL aspect embedded in Learning A–Z has students set their own goals and track their progress on those goals, important self-management skills that help students own their learning and reflect on their accomplishments. As students practice repeated reading of a decodable text or word study passage, they can set fluency goals and track their progress on fluency graphs. The student platform of Foundations A–Z also provides incentives to support tracking progress. Students earn stars when they complete activities that they can use to customize their avatar and other visual aspects of their interface. Students also earn badges for achieving milestones and see their progress toward each badge from a panel in the student interface that tracks the statistics of each student’s achievements.

Differentiated Instruction for English Language Learners and Variant English Speakers

Across the United States, one in every ten students is learning English while they are learning reading, writing, math, and building knowledge in content areas such as science and social studies (United States Department of Education, n. d.). Student English proficiency, schooling in their native country, and unique attributes of their native language vary considerably across this cohort, resulting in a wide range of student abilities and instructional needs.

In addition, native speakers of non-mainstream American English dialects (NMAE) may struggle with the sound-spelling patterns, semantics, and syntax associated with the mainstream American English (MAE) more widely used in the school system. Students who speak an English dialect that differs greatly from MAE might struggle with reading and listening comprehension as well as spelling and writing. Research with primary grade students (grades 1 and 2) who speak NMAE and whose overall language abilities are within normal limits for their age reveals that they score lower than similar students who use MAE (Hendricks & Adolf, 2020). Like English language learners (ELLs), this population requires additional instructional support.

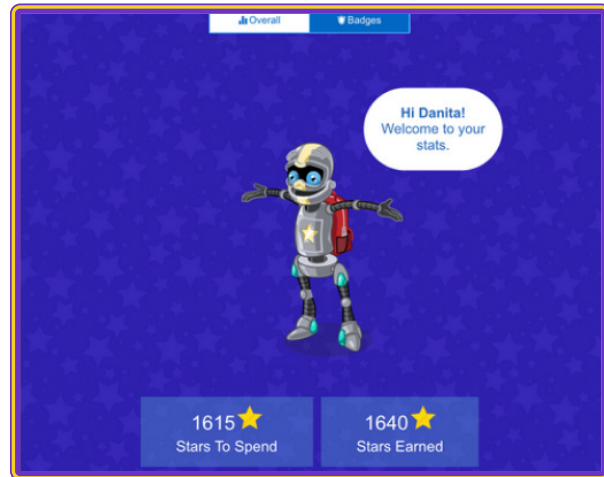
For ELLs and variant English speakers, learning to speak and read MAE is the equivalent of learning a second language. Speakers of Arabic may encounter a different set of learning obstacles than speakers of Jamaican Patois, but both populations will pass through five levels of language acquisition enroute to MAE reading and writing proficiency. Teachers need to differentiate their instruction to address the unique challenges faced by all non-native speakers as they progress through each level. The chart on the following page names and describes these levels in terms of both student and teacher classroom behaviors.



SEL Tip

Be sure to have students work with different partners throughout the lesson and throughout the school year. This allows students to work with and get to know different personality types.

Tips in Foundations A–Z lesson plans point out SEL opportunities, such as this tip next to a partner activity.



Students see their progress toward earning redeemable stars and badges from the My Stats area of Kids A–Z.

English Language Proficiency Levels

Levels	Student Behaviors	Teacher Behaviors
<p>Level 1: Entering or Beginning Language Learner</p>	<ul style="list-style-type: none"> • Uses very limited vocabulary, mostly functional words • Hesitates to speak in one or both languages for a short time (silent period) • Uses gestures, pointing, and single words to communicate • Copies written work • Repeats words and short phrases • Draws to demonstrate understanding of concepts 	<ul style="list-style-type: none"> • Provides lots of pictures, realia, diagrams, and other visuals • Models all instructions and provides examples • Writes/draws key words on a chart or whiteboard while presenting new information • Encourages speech, but does not force a student to speak • Builds in opportunities for students to talk with peers about the subject, practicing key vocabulary words • Repeats or rephrases statements in simpler terms • Helps students collect and write vocabulary words
<p>Level 2: Emerging Language Learner</p>	<ul style="list-style-type: none"> • Uses high-frequency repetitive words and short phrases to communicate • Speaks and understands short phrases but exhibits errors with phonology, syntax, and semantics • Uses simple written English with instructional support • Follows simple oral directions 	<ul style="list-style-type: none"> • Cues students to listen when the teacher is speaking • Presents concepts in many modalities • Models instruction and provides examples • Uses familiar vocabulary when presenting new concepts • Elaborates on students' ideas and encourages oral conversations with a partner • Asks students to repeat directions • Uses role-playing to encourage verbal expression
<p>Level 3: Developing Language Learner</p>	<ul style="list-style-type: none"> • Speaks in short, simple sentences with many grammatical errors • Initiates conversations • Uses and understands simple written English • Appears to understand when he or she does not understand • Shows reluctance to ask clarifying questions 	<ul style="list-style-type: none"> • Provides simple written instructions with picture clues • Models as appropriate • Rephrases instruction with simpler terms • Does not correct improper grammar; does rephrase a student's statement, modeling correct grammar
<p>Level 4: Expanding Language Learner</p>	<ul style="list-style-type: none"> • Speaks in more complex sentences but still exhibits some grammatical errors • Can use and understand grade-level written English with instructional support, such as word banks and graphic organizers • Gains confidence with language use 	<ul style="list-style-type: none"> • Simplifies written instructions • Teaches grammatical structures and expects students to correctly use the structures that were taught • Teaches figurative language • Repeats and/or rephrases as needed
<p>Level 5: Bridging or Advanced Language Learner</p>	<ul style="list-style-type: none"> • Works at grade level • Occasionally misunderstands due to different background knowledge and/or culture 	<ul style="list-style-type: none"> • Continues teaching figurative language • Provides extra assistance to build necessary background knowledge and/or experience

Sources: California Department of Education, 2012. Council of Chief State School Officers, 2012. Framework for English Language Proficiency Development Standards, 2014. Teaching English to Speakers of Other Languages international association, 2014. World-Class Instructional Design and Assessment, 2007.

The Foundations A–Z program features content-specific recommendations based on established classroom best practices with ELLs of all types. Every module includes ELL practical approaches to support the following key foundational skill areas: background knowledge, phonological awareness, phonics, high-frequency word recognition, language, and fluency. The approaches include language-specific tips as well as Foundations A–Z resources matched to specific student needs.

For example, repetition is especially important in the case of English sounds that are different or nonexistent in the student’s native language. Teachers should model the production of the target sounds, repeatedly if necessary (Robertson, n. d.), and use short words that include an array of sounds to develop phonological awareness. In addition to phonemes that may not exist in the student’s native language, there are phonemes that exist in the student’s native language but in it are represented by different graphemes when compared to English. Students still need instruction in phoneme-grapheme correspondences that are unique to English when compared to their native language (Shanahan, 2017).

The tips below offer specific suggestions for addressing such needs at point of use for students from different linguistic backgrounds.



ELL Tip

Although Spanish has a written z, it is always pronounced as an /s/. Spanish-speaking students will have to practice both articulating and perceiving /z/.

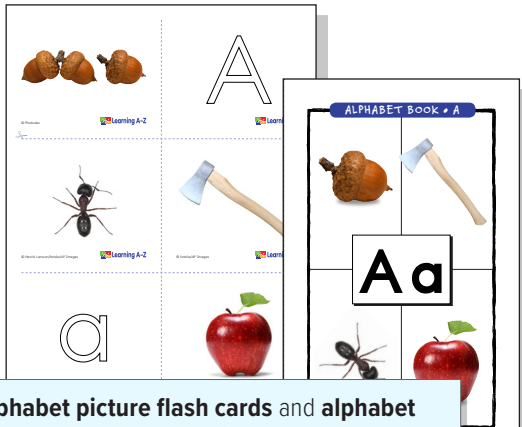


ELL Phonics Transfer Tip

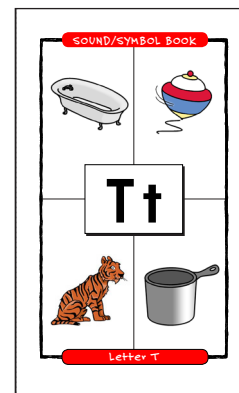
In some students’ home languages, such as Vietnamese and Cantonese, the sound transfer for /ë/ is only approximate. Listen carefully to students, and provide additional modeling if they are finding pronunciation of /ë/ challenging.



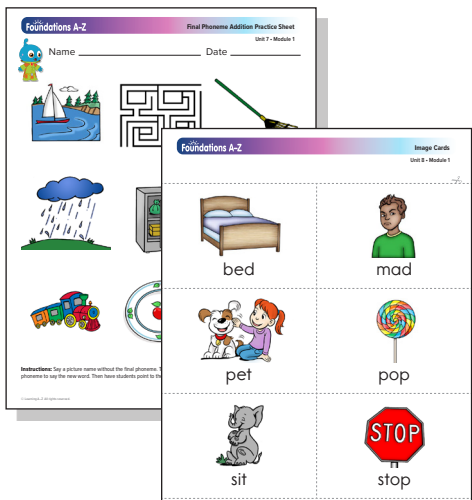
Lessons also include suggestions for Foundations A–Z resources that provide ample ELL support in phonological awareness, phonics, pronunciation, and vocabulary.



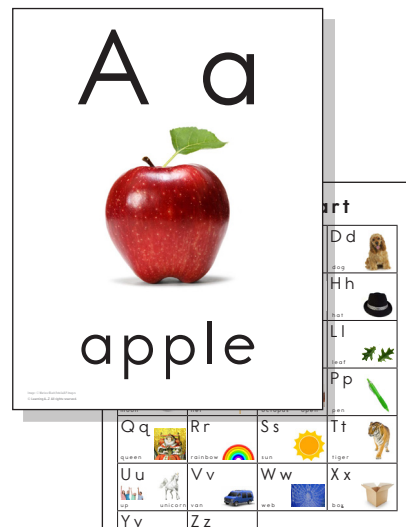
Alphabet picture flash cards and **alphabet books** include pictures of words that begin with each letter of the alphabet, helping students associate graphemes with phonemes and pictures. Alphabet books also provide sentence frames that are repeated across words and letters, such as “C is for cake.”



Sound/Symbol Books include pictures and words that contain specific individual phoneme-grapheme correspondences in different positions within the words, along with sounds that are common in English words. These books help associate letters with sounds and with pictures. Sound/symbol books also provide sentence frames that are repeated across words and sounds, such as “This is a street.”



Sound practice sheets and **image cards** help develop phonological awareness. Make sure to review or pre-teach the meaning of the words in the pictures.



Phoneme/grapheme cards and **charts** include pictures and key words that represent individual phoneme-grapheme correspondences common in English words.



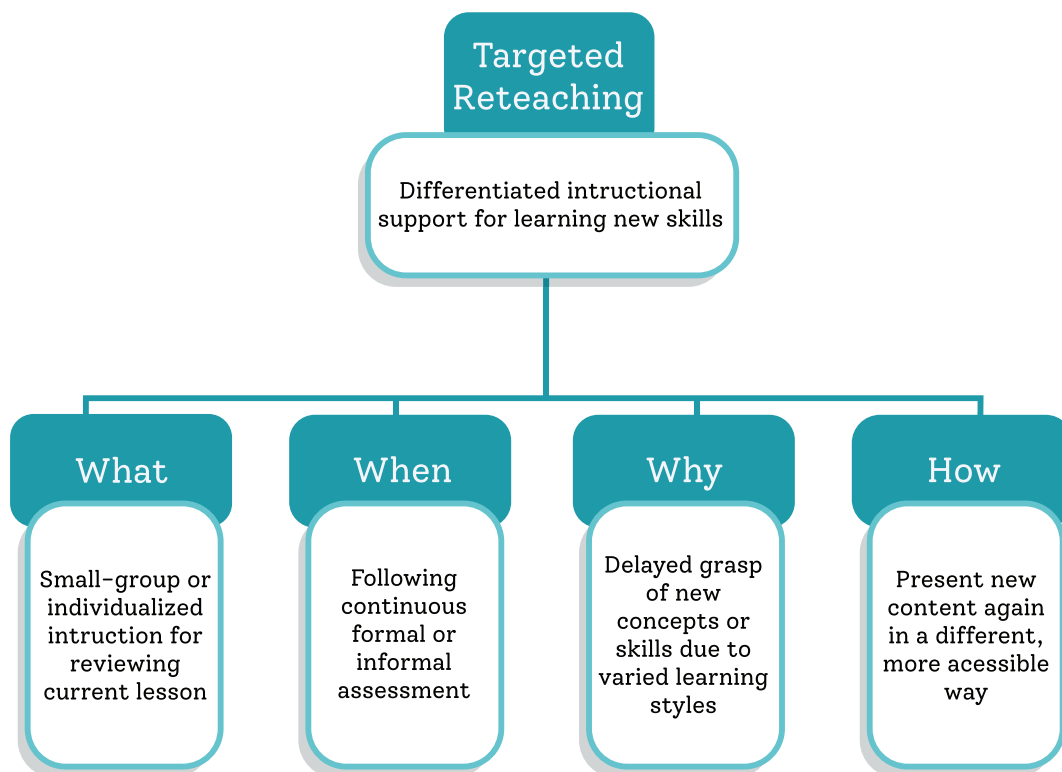
Pronunciation videos demonstrate the correct position and movement of the mouth, tongue, and larynx when pronouncing common sounds in English.

Multimodal Below-Level and Above-Level Support

Working with students of varying abilities is a challenge for even the most experienced teachers. Foundational skills proficiency requires flexible and fluid instruction informed by periodic assessment of student competency. Ongoing formative assessment is key to identifying which students are struggling or have exceeded expectations in a given skill or knowledge area (Rupley et al., 2009). Once student needs have been identified, teachers can adjust instruction via multimodal activities that address those needs, sustain motivation and engagement, and support learning (Ankrum & Bean, 2008).

Differentiation for Below-Level Students: Differentiating instruction with foundational skills is critical to developing fluent readers. Students whose reading ability is below grade level typically suffer from deficits in foundational skills. For example, poor phonological awareness and language skills in early childhood later transform into difficulties with decoding and word recognition (Lonigan et al., 2000). Introducing new skills then becomes a task involving ongoing assessment in order to diagnose gaps, followed by targeted reteaching, plus repeated practice to help students who fall behind their peers.

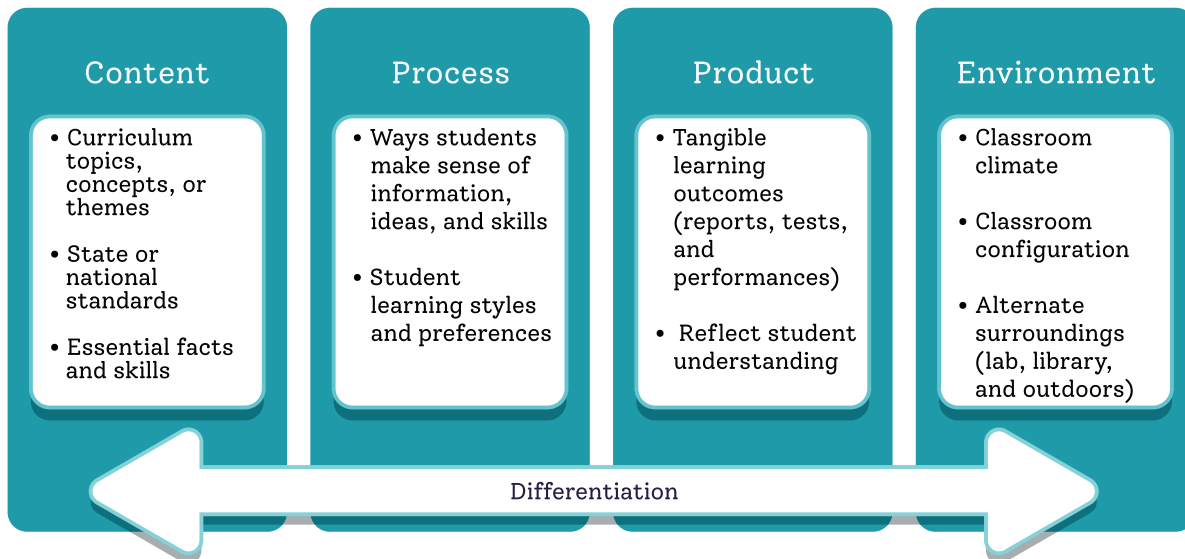
Targeted reteaching is different from remediation. Remediation is a more extensive and intensive intervention dealing with the root causes of delayed skill acquisition. It is often delivered by reading specialists in pull-out sessions that incorporate different modes of instruction. Targeted reteaching, on the other hand, is an effective process used by teachers to increase the likelihood that all students learn critical skills or meet current learning objectives by adjusting the pace (how fast) and dose (how much) of lesson content.



Differentiation for Above-Level Students: Students who are performing above grade level also need instruction specific to their needs. Terms sometimes equated with performing above grade level are *giftedness* or *gifted students*. However, these terms refer to different student populations that may overlap to some degree but are different in significant ways.

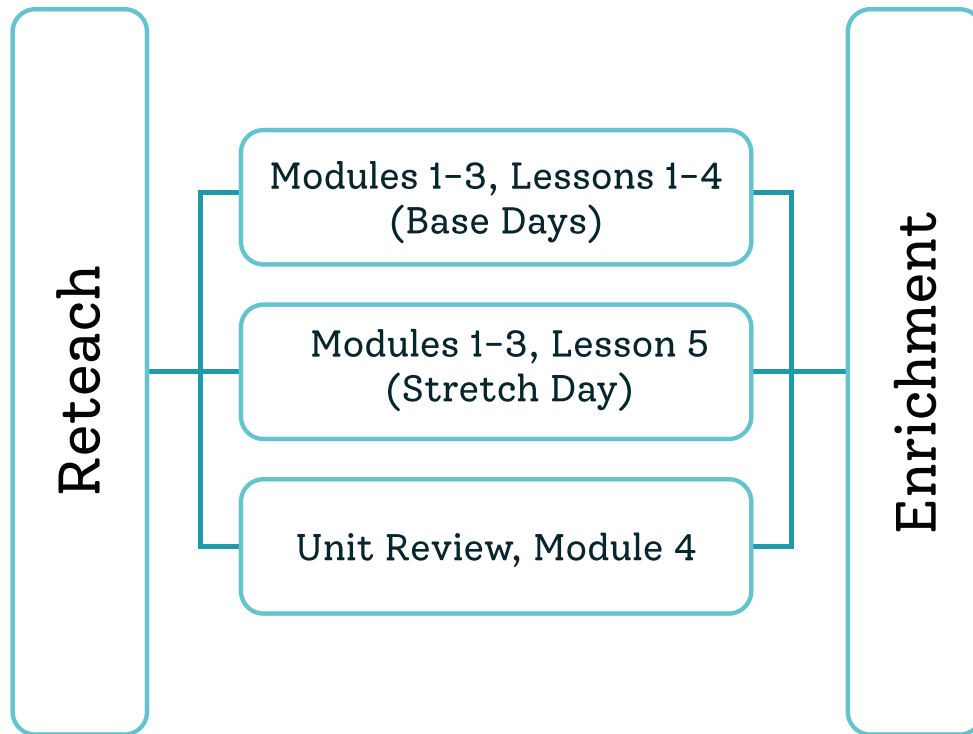
Gifted students are students whose abilities in a specific area consistently place them in the top 10 percent of their age peers. Students who are performing above grade-level are simply exceeding the performance expectations for their grade level and may or may not meet the criterion for giftedness. Performing above grade level may be highly variable from skill to skill and moment to moment: A student may perform above grade level in phonics but not in fluency, for example. Or a student who began the school year reading below grade level may accelerate and end the year reading above grade level.

Differentiation for students performing above grade level requires attention to variations in performance by skill and involves adjusting instruction across four areas: content, process, product, and learning environment (see figure below). Authentic, varied tasks that incorporate reading, writing, listening, and speaking keep students engaged and motivated by requiring them to apply acquired skills in different ways and contexts.



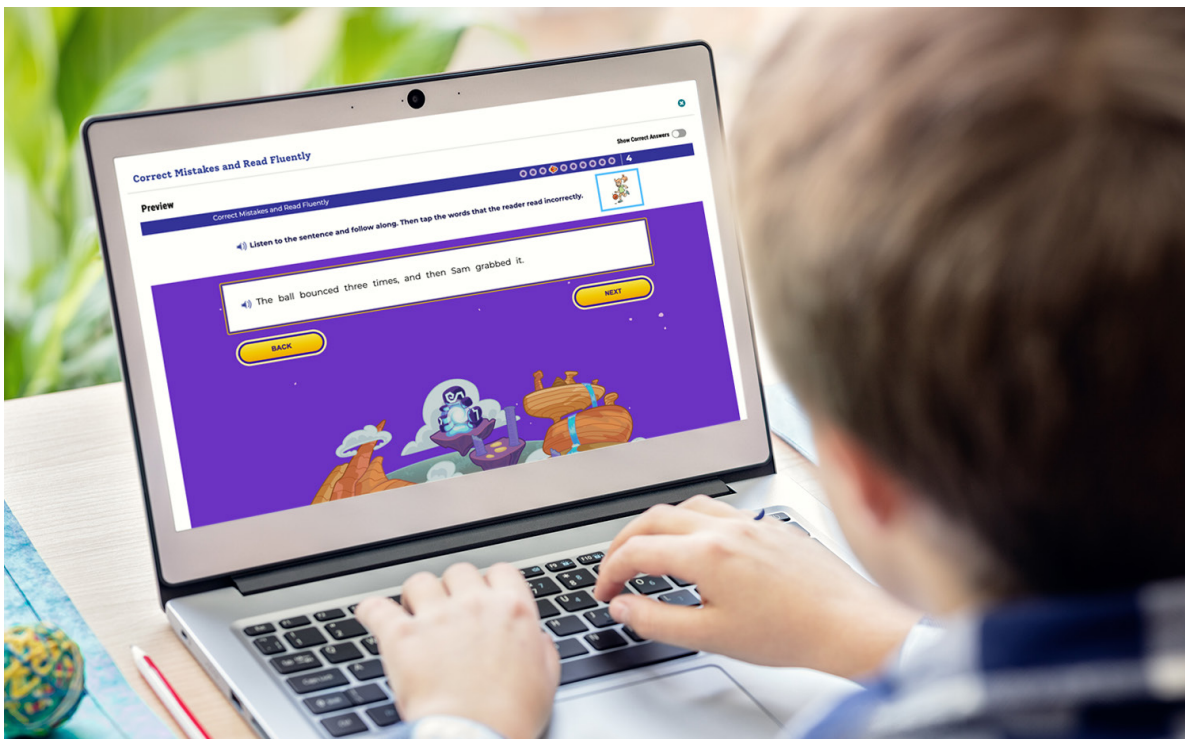
Differentiating content, process, product, and environment

Foundations A–Z supports differentiated instruction for all students through an instructional sequence that incorporates ongoing assessment and systematic feedback to teachers to determine and address student needs. To help ensure that students who are reading significantly below or above grade level receive substantial support and additional opportunities to learn, the program includes three layers of differentiation: one in the base day lesson, one in the stretch day, and one in the review module of each unit (see figure on the following page). Furthermore, differentiation is anchored in specific skills, which allows teachers to fine-tune the reteaching to the specific areas where students are struggling.



Reteach and enrichment opportunities in Foundations A–Z

Specific reteaching and enrichment activities are featured at the end of each base-day lesson and include multisensory and multimodal techniques that are authentic, purposeful, and engaging. Students are provided the opportunity to read, write, manipulate, listen to, and verbally respond to explicit teacher instruction. In addition, digital practice activities and videos are offered as customized individual supports based on formative and summative assessments within and at the end of each module.



BUILDING READING SKILLS

Teaching the Foundations

Grounded in current research-based practices proven to be effective, Foundations A–Z provides the explicit, systematic approach to foundational literacy instruction most students need to become skilled readers. The program’s scope and sequence integrates all the components of a comprehensive foundational skills program for grades K–5:

- Print Concepts
- Phonological Awareness
- Alphabetic Principle
- Phonics
- High-Frequency Words
- Word Analysis (Word Study and Morphology)
- Fluency
- Decodable Texts, Shared Readers, and Grade-Level Texts

For each of these critical areas, the pages that follow demonstrate the firm connection between research and practice in Foundations A–Z.

Print Concepts

Having an awareness of print concepts involves understanding that printed letters and words have meaning related to spoken language, as well as knowledge of how print is organized to convey meaning. Book-handling skills, print directionality, book parts, and text features are examples of print concepts that must be taught to early readers to lay a foundation for understanding how reading works. When students are aware of print concepts, they are better prepared to read and write across a variety of genres.

The Research

- Early literacy instruction about print is an active process that focuses students’ attention on features of the writing system that must be understood in order to read (Levy et al., 2006).
- To acquire the alphabetic principle and comprehend texts, students require a foundational understanding of how print works (Justice & Sofka, 2010).
- Evidence shows the benefits of calling attention to print—using verbal and nonverbal references while reading with students—to improve students’ print knowledge (Justice & Sofka, 2010).
- For students to become skilled readers and writers, they must grasp the concept of printed language and gain an understanding of the academic language teachers use to talk about print (Reutzel et al., 1989).

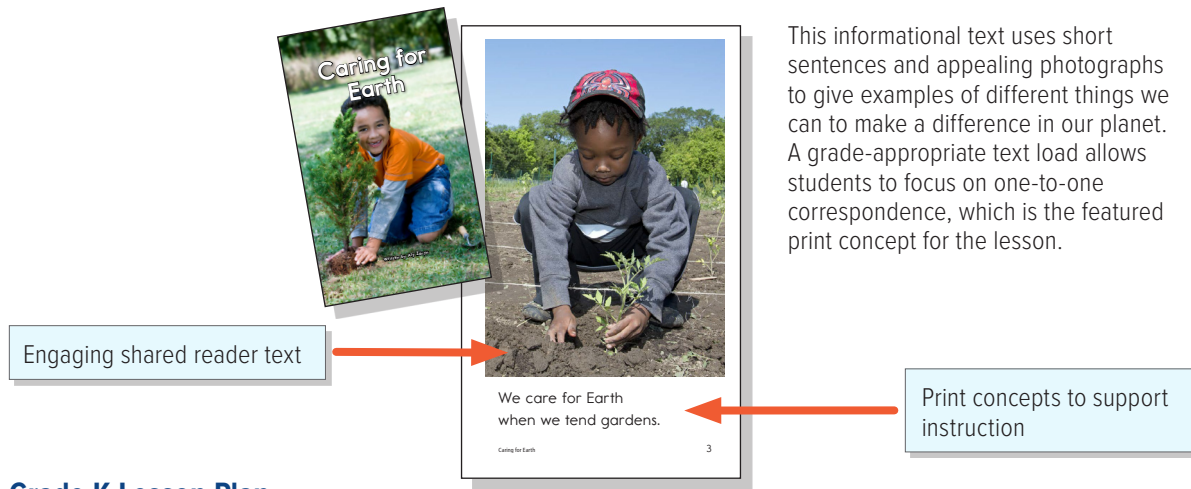
Foundations A–Z Research-Based Solutions

Instruction for print concepts is thoughtfully integrated into the Foundations A–Z lesson plans for grades K and 1, using shared reader texts as the springboard for modeling and discussion. These rich texts can be projected or printed, depending on teaching preferences or the particular skill being taught. Skills for print concepts progress from basic to more complex, and the lessons build in regular spiral review.

- One print concept skill is the focus of explicit instruction for each module. Lessons provide sample dialogue to demonstrate best practices using verbal cues and gestures to point out salient features of the shared reader. Students return to the text throughout multiple lessons for repeated practice with increasing independence.
- In grade K, initial instruction with print concepts focuses on recognizing and naming the letters of the alphabet through interactions with print, such as the shared reader text, alphabet chants and books, and environmental print images.
- Continuing in grade K, students learn the basics of one-to-one correspondence, as well as text directionality (e.g., top to bottom, left to right). Best practices in using shared readers to develop print concepts include the use of explicit language in describing text features (e.g., author, illustrator), pointing out conventions of print (e.g., capital letters, word boundaries, punctuation), and demonstrating how to use print organization and directionality (e.g., left-to-right progression) to navigate text.
- In grade 1, instruction in print concepts continues, progressing from learning the basic organization and features of print to the features of a sentence (e.g., capitalization, ending punctuation). Lessons focus on skills, such as identifying various text features and understanding their purpose (e.g., concepts of graphics, headings/subheadings, captions, table of contents), as well as discussing characteristics of fiction and nonfiction genres.



Grade K Shared Reader Text: *Caring for Earth*



The image shows the book cover and page 3 of 'Caring for Earth'. The cover features a child in an orange shirt planting a tree. Page 3 shows a child in a grey shirt planting a seedling. Callouts point to the cover, the text on page 3, and the page number.

Engaging shared reader text

Print concepts to support instruction

This informational text uses short sentences and appealing photographs to give examples of different things we can do to make a difference in our planet. A grade-appropriate text load allows students to focus on one-to-one correspondence, which is the featured print concept for the lesson.

Grade K Lesson Plan

Explicit, systematic instruction

Print Concepts: Shared Reading: *Caring for Earth*

2 mins

1. **Display** *Shared reader: Caring for Earth*. Discuss the importance of the cover of a book. Explain that important information, such as the title, author, and illustrator can be found there. Model how to turn the page properly and point out the information found on the title page. Turn to the first page of text and point out the page number found at the bottom right of the page. Then point out the back cover of the book.

✓ Sample Dialogue

When I pick up a book, the very first thing that I see is the front cover. The cover is very important because it tells us the title of the book. It will also have the author's name. If there are pictures in the book, the illustrator's name will be there as well. The author is the person who writes the story. An illustrator draws the pictures. Now let's flip the book over and see the back cover. What can we find on the back cover? I see the title on the back cover too. When I open the book, the first page is called the title page. This page includes the title, author, and illustrator. What else do you see on this page? (a picture) What do you notice at the bottom of each page? Do you see that little number? That number is the page number. Let's put our finger on the page number and say the number together. Notice how when I turn the page, the number changes, it gets bigger by one.

2. **Using** the Shared reader: *Caring for Earth* have students find the title of the book as well as the author.

✓ Sample Dialogue

Look at the book in front of you. You are looking at the cover of the book. I want you to look for the title and when you find it, underline it. You should have underlined three words: Caring for Earth. Now I want you to find where you think the author's name is found. When you find it, circle it.

3. **Collaborative Practice:** Have students turn the pages of the book and find the page numbers. Then have

Teacher sample dialogue for modeling

Phonological Awareness

Phonological awareness is a broad term that incorporates the ability to hear and manipulate sounds in words. It includes awareness of sounds at the word level, syllable level, onset-rime level, and phoneme level. Phonemic awareness, a subcategory of phonological awareness, refers to students' ability to recognize and manipulate the smallest units of sound (phonemes). Students with phonological awareness and phonemic awareness can hear, identify, and manipulate sounds in oral language, which later prepares them to make connections between speech and printed words.

The Research

- Phonological awareness skills in general, and phonemic awareness skills in particular, are powerful predictors of future decoding skills (National Early Literacy Panel, 2008).
- Phonological awareness instruction should be explicit and include teacher modeling followed by student practice (Cunningham & Stanovich, 1990).
- Phonological awareness develops in a predictable sequence of basic to more complex and from larger units of speech (words) to the smallest units of speech (phonemes) (Lane & Pullen, 2004).
- The use of markers, such as chips or buttons, to represent phonemes can help to make phonemic awareness instruction concrete for students (Ehri & Roberts, 2007).
- Correct pronunciation of phonemes in phonemic awareness activities supports successful blending with continuous sounds, such as /m/, and the more challenging stop sounds, such as /b/ and /t/ (Lane & Pullen, 2004).

Foundations A–Z Research-Based Solutions

Instruction for phonological awareness adheres to a research-based progression that starts at the word level in kindergarten and moves to the syllable level. Next, the sequence focuses on the onset-rime level and finally the phoneme level, which is most emphasized across kindergarten and grade 1. Within each of these levels, students engage in activities that incorporate blending, segmentation, deletion, and other manipulation tasks.

- Phonological awareness instruction within the lesson plans begins with teacher modeling and includes ample practice in the form of interactive word play and through the use of manipulatives to support student engagement and motivation.
- The selection of words in phonemic awareness activities is purposeful, creating a direct link to the phonics instruction that follows. For example, students isolate the final phoneme in words such as *with* and *mash* in the same lesson they decode words with final consonant digraphs.
- Special attention to the articulation of phonemes is integrated throughout the program, including teacher modeling, the use of mirrors to support students with correct mouth positions, projectable images for mouth articulation positions, and phoneme pronunciation videos. These resources establish the correct pronunciations for blending to read words.

Grade K Lesson Plan

Print Concepts: Shared Reader: *Caring for Earth*

3 mins

1. **Display** the shared reader [Shared reader: *Caring for Earth*](#) again and remind students of one-to-one correspondence.

✓ [Sample Dialogue](#)

When we just reread this text, we were making sure to point to each word as we read. It is important to make sure you point to each word as we read them out loud. This helps us focus on each word as we read.

2. **Reread** page 12 to students. Have students find words in the [Shared reader: *Caring for Earth*](#) that have the letters *Mm*, *Ii*, or *Tt* in them. Remind students that words are made up of letters, and it is important to look at the letters in each word as we are trying to read them. Guide students to point out the word it and name the letters in the word.

✓ [Sample Dialogue](#)

Let's look at the words on this page and find any words with the letters *Mm*, *Ii*, and *Tt* in them. Remember, all the words we read are made up of letters. Who can help us find one of the letters we are learning about this week? (Call on volunteers to find the letters in the words.) I see the word it too! It starts with a letter we learned about this week, *i*. Let's all point to the word *it*. This word is spelled with two letters. Watch as I point to each letter and say the letter's name, *i*, *t*. Try it with me! Point to each letter that spells it and say the letter names with me; *i*, *t*.

3. **Collaborative Practice:** Have pairs of students point to the word many on page 12 and read the word aloud. Have students point to each letter and tell their partner how many letters are in the word. Then have students tell their partner what letter the word starts with.

Check for Understanding

1 - Print Concepts

I can point to each word being read aloud.

2 - Print Concepts

I can point to the letters in words and identify them as letters.

Observe students as you read and record in the [Observation checklist for Unit 1, Module 2, Lesson 4](#).

**See Reteach/Enrich section for follow-up activities if needed.

Phonemic awareness is developed explicitly prior to the introduction of each phoneme-grapheme correspondence, with embedded supports for articulation.



ELL Tip

This is an aspirated, bilabial stop, meaning the lips must completely close. Most languages have this sound, but in English, it has to be *aspirated*, which is a puff of air accompanying this sound. This aspiration is important as it serves to distinguish it from /b/ to the English air. Some languages, such as Spanish and Arabic, have an unaspirated /p/, so it is important to have speakers of these languages to cue in on the aspiration. After an /s/, the aspiration is lost (this happens due to aerodynamic reasons). Compare the quality of aspirations in *peak* versus *speak*.



ELL Tip

Have students put their hands or a piece of paper in front of their mouth when saying the /p/ sound to feel the puff of air come out.

Interactive practice is provided in each lesson, which allows teachers to check for understanding in the moment of teaching.

Teachers can print or project mouth articulation position images for students as each phoneme is introduced.

Mouth Articulation Positions

P



Grade 1 Lesson Plan

Phonological Awareness: Segment Single-Syllable Words

2 mins

1. **Review** with students that a consonant blend is made from two or more consonant sounds blended together, and each sound is heard in the blend. Say a word and have students repeat it. Then have students segment and count the sounds in the word. Model with the word *rink* using a chopping motion. Start with palms together and chop outward with each sound. Then slide your hands back together to say the whole word.

✓ **Sample Dialogue**

We learned that words are made up of sounds. Let's listen to the sounds of the word *rink*: /r/ /i/ /n/ /k/.
How many sounds do you hear in the word? (four) Let's say the sounds again: /r/ /i/ /n/ /k/. (Use a chopping motion when segmenting each sound.) What is the vowel sound? (/i/) Let's practice some more words, but this time, I'm going to give you the word, and I want you to chop the sounds with me.



ELL Tip

English language learners may have difficulty identifying the two sounds in the final blends. Help them isolate and identify both sounds in a blend.

Teacher modeling, including suggested sample dialogue, is included for each phonological awareness lesson.

2. **Practice:** Students identify the individual sounds in the words represented on Image cards.

Check for Understanding

2 - Phonological Awareness

I can break apart the sounds in a word and count them.

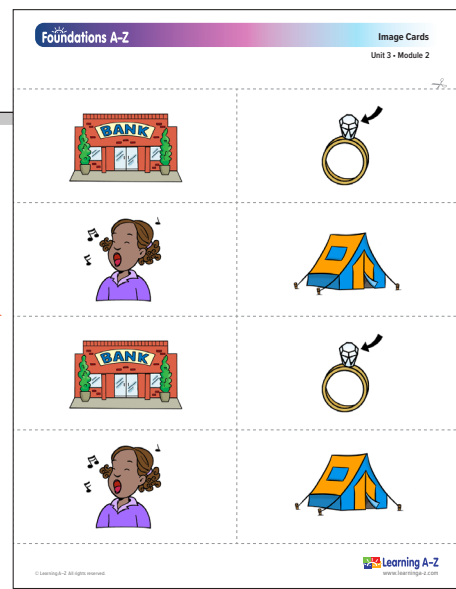
Observe students during the activity and record in the [Observation checklist for Unit 3, Module 2, Lesson 3.](#)

**See Reteach/Enrich section for follow-up activities if needed.

3. **Corrective Feedback:** If students are struggling, use a concrete model, such as workmats with chips, to isolate each sound and emphasize the sounds of the final blends.

The use of workmats and chips is suggested to make abstract concepts concrete for students.

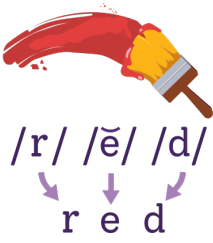
Image cards offer appropriate keywords for student practice with phonemic awareness skills, which prepares them for the related phonics segment of the lesson they will encounter next.



Alphabetic Principle

The alphabetic principle involves knowing that words are made up of letters and that letters represent the sounds of speech. It also involves phonological recoding, which is the ability to translate letters in printed words into sounds to read and then say those words correctly. Instruction in this area focuses on naming, forming, and recognizing letters, as well as learning the most common letter-sound correspondences.

The Role Alphabetic Principle Plays in Transitioning from Phonological Awareness to Phonics		
1. Sounding Out Words	Students say each individual sound out loud as they look at the letter.	/r/ /ě/ /d/
2. Segmenting and Blending Words	Students segment the word one sound at a time and then blend the whole word.	/r/ /ě/ /d/ red
3. Reading Words by Sight	Students segment the word in their head as needed and then say the word.	/r/ /ě/ /d/ red
4. Reading Words Automatically	Students read the word automatically, without sounding it out.	red



The Research

- An intentional, systematic scope and sequence for teaching letters is essential (Treiman, 2006). The sequence in which letters are introduced typically mirrors the order in which speech sounds are acquired and their utility in forming words, as well as the likelihood of their distorted pronunciation in isolation (Adams, 1990; Stahl & Murray, 1998).
- Students' knowledge of letter names can help them remember the related letter sounds, so it is beneficial to teach both simultaneously (Ehri & Roberts, 2007).
- Important factors to consider when planning the sequence of instruction are the frequency of letters appearing in CVC words, discriminability (i.e., letters that are visually different from or similar to each other), and students' ability to produce the letter and/or sound correctly (Justice et al., 2006).
- When students learn letter names and sounds at a pace faster than one letter per week, it allows more time for repeated exposure and more opportunities to practice and reteach letters as needed, which allows students to make more progress in reading overall and advances automaticity in reading words (Jones et al., 2012).
- Explicit handwriting instruction supports letter recognition and achievement in reading and writing (Graham & Harris, 2005).

Foundations A–Z Research-Based Solutions

Foundations A–Z employs a carefully planned scope and sequence for teaching letters and letter sounds. All twenty-six letters are introduced in kindergarten, Units 1–3, allowing students to transition to blending and applying their learning to connected texts as early as possible.

- The scope and sequence begins with letters that commonly appear in CVC words and are easier for students to remember because the letter names contain the letter sounds.
- Letters that are visually similar, such as *B*, *D*, and *P*, are not introduced within the same module, to minimize confusion.
- Letters that are phonologically similar, such as *b* and *p*, are also introduced at different times.
- As each letter is introduced, students also receive explicit instruction in letter formation following a consistent stroke sequence.

Unit 1	
Module 1	<i>a, n, p</i>
Module 2	<i>i, m, t</i>
Module 3	<i>d, o, s</i>

Unit 2	
Module 1	<i>e, f, h</i>
Module 2	<i>b, r, u</i>
Module 3	<i>j, l, w</i>

Unit 3	
Module 1	<i>k, v, y</i>
Module 2	<i>q(u), x, z</i>
Module 3	<i>c, g</i>

The sequence of letter instruction begins with letters whose names contain the letter sound, a powerful reminder while students' are learning.

Grade K Student Resources

Carefully chosen key words for each letter are reinforced through multiple resources to cement the phoneme-grapheme connection in students' minds.

Each upper- and lowercase letter includes direct instruction with a specific stroke sequence students follow in the Teach and Guided Practice sections of the lesson.



Handwriting: Produce the Letter Form for Bb

4 mins

- 1. Model** the sequence of strokes in the uppercase *B* by air writing the letter. Repeat this procedure a few times until the students appear confident with the sequence. Use the following stroke sequence: Start at the top line. Draw a line straight down to the baseline. Retrace back to the top line. Curve around to the right to draw a bump that touches the midpoint. Curve around to the right to draw a bump that touches the baseline.

✓ [Sample Dialogue](#)

We learned the /b/ sound and the letter that represents it. Now, we are going to learn how to write that sound by forming the letter *Bb*. Let's start by writing the uppercase *B*. First, watch me air-write uppercase *B* with my index finger.
Start at the top line. Draw a line straight down to the baseline. Retrace back to the top line. Curve around to the right to draw a bump that touches the midpoint. Curve around to the right to draw a bump that touches the baseline.






- 2. Say** the stroke sequence as you write the uppercase *B*. Have students practice on their whiteboard while saying the sound aloud.

- 3. Model** the sequence of strokes in the lowercase *b* by air writing the letter. Repeat this procedure a few times until the students appear confident with the sequence. Use the following stroke sequence: Start at the top line. Draw a line straight down to the baseline. Retrace back to the midpoint. Curve around and down to the baseline.

✓ [Sample Dialogue](#)

Now that we have learned how to write the uppercase *B*, we will learn how to write the lowercase *b*. Watch me write it in the air first. Start at the top line.
Draw a line straight down to the baseline. Retrace back to the midpoint. Curve around and down to the baseline.

Handwriting Stroke Sequence ⓘ ⚙

Letter	Stroke Sequence
	<ol style="list-style-type: none"> 1. Start at the top line. Draw a line to the base line that slants down and to the left. Pick up the pencil. 2. Go back to the starting point. Draw a line to the base line that slants down and to the right. Pick up the pencil. 3. At the midpoint, draw a line across from the left to the right.
	<ol style="list-style-type: none"> 1. Start just below the midpoint. Draw a curve up to the left to touch the midpoint. 2. Curve around to touch the base line. Curve back to the starting point and pull a line straight down to the base line.
	<ol style="list-style-type: none"> 1. Start at the top line. Draw a line straight down to the base line. 2. Retrace back to the top line. Curve around to the right to draw a bump that touches the midpoint. 3. Curve around to draw a bump that touches the baseline.
	<ol style="list-style-type: none"> 1. Start at the top line. Draw a line straight down to the base line. 2. Retrace back to the midpoint. Curve around to draw a bump that touches the base line.
	<ol style="list-style-type: none"> 1. Start just below the top line. Draw a curve up to the left to touch the top line, continue the curve down to touch the base line, continue the curve up to just below the midpoint.

Phonics (Decoding and Encoding)

Phonics is a skill-based approach to reading instruction that teaches the relationships between the letters of written language and the sounds of spoken language. Explicit, systematic, cumulative phonics instruction is essential to early literacy instruction, so that students can consistently apply learned letter-sound relationships and patterns to read words without guessing and to encode as they write. Phonics instruction leads to the larger goal of teaching students to read with fluency and comprehension.

The Research

- Students who receive systematic and explicit instruction in phonics are stronger readers than students who do not receive any phonics instruction or students who receive phonics instruction that is not systematic and explicit. Explicit instruction clearly explains how to do something using modeling, in contrast to an expectation of student discovery (Armbruster et al., 2001; Carnine et al., 2006).
- Hundreds, if not thousands, of research studies and decades of practice confirm that phonics is an effective way to teach decoding (word reading) and encoding (spelling) (NICHD, 2000). To be effective, phonics instruction should follow a systematic scope and sequence, moving from simple to more complex skills. Scope refers to instructional content; sequence refers to the order in which letter-sound correspondences are taught (Mesmer & Griffith, 2005). That sequence should start with the correspondences that have the greatest utility in making and reading words (Adams, 1990; Moats, 2009).
- Another consideration in sequencing instruction is the degree to which sounds can be produced in isolation without distortion. For this reason, instruction typically begins with high-frequency consonants such as /m/, /n/, and /s/, because they appear frequently in common words and are not prone to mispronunciation (Adams, 1990; Stahl et al., 2006). Short vowel sounds should follow high-use consonants, allowing students to segment and blend the sounds in simple CVC words such as *mat*. As students gain proficiency with more common phonics elements, they can move on to digraphs, inflectional endings, and long vowels (Moats, 2009).
- Students do not need to master phonemic awareness (the ability to hear and manipulate phonemes) to begin phonics instruction with letter names, formation, and associated sounds; instruction in phonemic awareness should occur in tandem with phonics instruction (International Literacy Association, 2019b).
- Studying phonograms, or rime patterns, as the basis of word families is an important aspect of phonics instruction and should build on what students have learned through explicit, systematic instruction in letter-sound correspondences. With knowledge of phonograms, the number of connections that students need to make to decode a word is reduced. Initial instruction in phonograms begins with the thirty-seven most common rimes (Wylie & Durrell, 1970; Ehri, 2000).

Foundations A–Z Research-Based Solutions

In Foundations A–Z, phonics instruction aligned with a research-based scope and sequence is the backbone of all other instruction and practice in the program. The sequence progresses from simple phoneme-grapheme correspondences in kindergarten to more complex structural skills and morphology in grades 3–5. The cumulative design of the scope and sequence and all practice ensures regular spiral review and repetition.

- Phonics instruction is explicit and systematic. Lesson plans include specific and effective directions for introducing each new skill with sample dialogue to support teachers in the moment of instruction, including modeling.
- Lessons utilize a gradual release model of I Do (Teach), We Do (Guided Practice), You Do (Independent Practice), moving students toward independent application of each skill or concept one at a time.
- Phonics instruction begins early in kindergarten, while phonemic awareness instruction continues in a way that prepares students for what they are about to learn in phonics. In other words, students learn how sounds work and immediately connect those sounds to letters in print.
- The scope and sequence progresses from simple phoneme-grapheme correspondences in kindergarten to more complex structural skills and morphology in grades 3–5. Early in the sequence, high-utility sound spellings and consistent phonics elements are prioritized. The cumulative design of the scope and sequence and all practice ensures regular spiral review and repetition.
- Students are introduced to phonograms and word families beginning in kindergarten. Instruction and practice focus on recognizing spelling patterns in words. Students are guided through hearing, saying, reading, building/manipulating, and encoding words using the target phonograms.
- Students learn how to encode by matching phonemes to graphemes. They manipulate letters as they discuss patterns and word meaning. Dictation activities and writing tasks throughout the modules provide encoding practice in and out of context.
- Phonics instruction at grades 3–5 builds on skills and knowledge acquired in the primary grades. Less common and variant phonics elements are systematically introduced one at a time.
- In grades 3–5, the program continues to introduce longer words with familiar phonics elements. Scaffolded instruction presents more complex words in isolation, then in phrases, sentences, and connected text, to build automaticity and fluency.

Phonics Scope and Sequence

Phonics	
<ul style="list-style-type: none"> CVC spelling pattern Jobs of the y Closed syllables FLoSS rule CVCe spelling pattern VCe syllable 	
<ul style="list-style-type: none"> Consonant digraphs: <i>ch</i> variants, <i>ck</i>, <i>ng</i>, <i>ph</i>, <i>sh</i>, <i>th</i>, <i>wh</i> Consonant blends: <i>s</i>-blends <i>sk</i>, <i>sm</i>, <i>sn</i>, <i>sp</i>, <i>st</i>, <i>sw</i>; <i>r</i>-blends <i>br</i>, <i>cr</i>, <i>dr</i>, <i>fr</i>, <i>gr</i>, <i>pr</i>, <i>tr</i>; <i>l</i>-blends <i>bl</i>, <i>cl</i>, <i>fl</i>, <i>gl</i>, <i>pl</i>, <i>sl</i> Closed syllables Blend and blends with digraphs: <i>shr</i>-, <i>squr</i>-, <i>thr</i>-, <i>tw</i>- VCe syllable 	
<ul style="list-style-type: none"> Final <i>n</i>-blends and other blends: <i>-ct</i>, <i>-ft</i>, <i>-ld</i>, <i>-lk</i>, <i>-lp</i>, <i>-lt</i>, <i>-mp</i>, <i>-nd</i>, <i>-nk</i>, <i>-nt</i>, <i>-pt</i> Final consonant blend with digraph <i>-nch</i> and trigraph <i>-tch</i> Initial three-letter blends: <i>scr</i>-, <i>spl</i>-, <i>spr</i>-, <i>squr</i>-, <i>str</i>- Closed syllables and VCe syllable Contractions: <i>he'll</i>, <i>she'll</i>, <i>they'll</i>, <i>we'll</i> Contractions: <i>can't</i>, <i>don't</i>, <i>he's</i>, <i>I'm</i>, <i>I've</i>, <i>she's</i> 	

The phonics scope and sequence across grades K–5 is carefully crafted to progress from simple to more complex. For example, in grade 1, initial blends are taught before final blends and then instruction moves to vowel digraphs, diphthongs, and *r*-controlled vowels.

Meaningful Connections Within a Module Support Learning

Linking Phonemic Awareness to Phonics

Students will be able to identify the initial sound heard in single-syllable words with three phonemes, including words with initial digraph *sh*.

Students will be able to identify and produce the phoneme-grapheme correspondence for the consonant digraph *sh*.

Decoding a Newly Taught Word /Manipulating and Building Words

Students will be able to decode CCVC and CVCC words with initial or final consonant digraph *sh*.

Encoding Words, Phrases, and Sentences

Students will be able to spell CCVC and CVCC words with initial or final consonant digraph *sh*. Students will be able to form upper- and lowercase letters in print.

As shown in this kindergarten example, the student learning objectives in each module are designed to progress from learning the graphemes that phonemes represent to decoding, manipulating, building, and finally encoding words with newly taught phonics patterns. At the end of each module and unit, the skills are reviewed.

Grade 1 Lesson Plan

Phonics: Phoneme/Grapheme Correspondence: Long Vowel o Digraph oa

4 mins

1. Write the words *cot* and *coat* on the board. Use the two words to differentiate between the short and long vowel sounds of the letter *o* and to introduce the digraph *oa*.

▼ [Sample Dialogue](#)

We know that the letter *o* makes a short sound, /ɒ/, and a long sound, /ō/. The first word that I have written on the board has the short /ɒ/ sound: /k/ /ɒ/ /t/, *cot*. Now, let's look at the second word that I have written. (Point to the letters in the word and read them aloud: *c-o-a-t*.) This word looks similar to *cot*, except it has the vowels *oa* in the middle. These vowels are called a *vowel digraph*. A vowel digraph has two letters and stands for one sound. The vowels *oa* together spell the sound /ō/. Now, I will read this word aloud: /k/ /ō/ /t/, *coat*. This word sounds different from the word *cot*. The vowel digraph *oa* in the word *coat* spells the long vowel sound: /ō/. You will hear the long vowel sound /ō/ in words with these vowels.

2. Display [Phoneme/grapheme cards singular boat](#), and review the phoneme /ō/.

▼ [Sample Dialogue](#)

We practiced listening for the vowel sound in words earlier. One vowel sound we heard in some words was /ō/. Let's say the sound together: /ō/. This is a picture of a boat. What vowel sound do you hear in *boat*? (/ō/) Listen for the /ō/ in the middle of these words. When you hear the sound /ō/, say /ō/ after I say the word: *rope, top, slide, goat, pant*.

3. (Optional) **Introduce** and model the mouth position for the /ō/ sound using a mirror. This vowel is a mid, back, round vowel. Be certain that students are rounding their lips quite a bit as they do for /uw/. Use [Mouth Articulation Positions](#) as a reference, if needed

▼ [Sample Dialogue](#)

Round your lips a lot, as if you are trying to make a circle with your lips. (Have students say words with the long /ō/ sound, and notice their mouth position.)

4. Continue to display the [Phoneme/grapheme cards singular boat](#), and teach the connection between the phoneme and the grapheme.

▼ [Sample Dialogue](#)



ELL Tip

In other languages, such as Spanish and Chinese, the lips are much more relaxed and open. Indeed, the lips are so open and relaxed in these languages that many English speakers perceive these /ō/'s as /ă/.

Phonics instruction is explicit and systematic. Sample dialogue supports teachers with the language to introduce each new phonics element. In each lesson, the I Do, We Do, You Do progression intentionally transfers the responsibility to students as they become ready.

Grade 3 Lesson Plan

Lessons in grades 2 and up emphasize syllabication instruction and decoding multisyllabic words.



Print Concepts: Shared Reader: *Caring for Earth*

3 mins

1. **Display** the shared reader [Shared reader: *Caring for Earth*](#) again and remind students of one-to-one correspondence.

✓ [Sample Dialogue](#)

When we just reread this text, we were making sure to point to each word as we read. It is important to make sure you point to each word as we read them out loud. This helps us focus on each word as we read.

2. **Reread** page 12 to students. Have students find words in the [Shared reader: *Caring for Earth*](#) that have the letters *Mm*, *li*, or *Tt* in them. Remind students that words are made up of letters, and it is important to look at the letters in each word as we are trying to read them. Guide students to point out the word it and name the letters in the word.

✓ [Sample Dialogue](#)

Let's look at the words on this page and find any words with the letters *Mm*, *li*, and *Tt* in them. Remember, all the words we read are made up of letters. Who can help us find one of the letters we are learning about this week? (Call on volunteers to find the letters in the words.) I see the word *it* too! It starts with a letter we learned about this week, *i*. Let's all point to the word *it*. This word is spelled with two letters. Watch as I point to each letter and say the letter's name, *i*, *t*. Try it with me! Point to each letter that spells it and say the letter names with me; *i*, *t*.

3. **Collaborative Practice:** Have pairs of students point to the word *many* on page 12 and read the word aloud. Have students point to each letter and tell their partner how many letters are in the word. Then have students tell their partner what letter the word starts with.

Check for Understanding

1 - Print Concepts

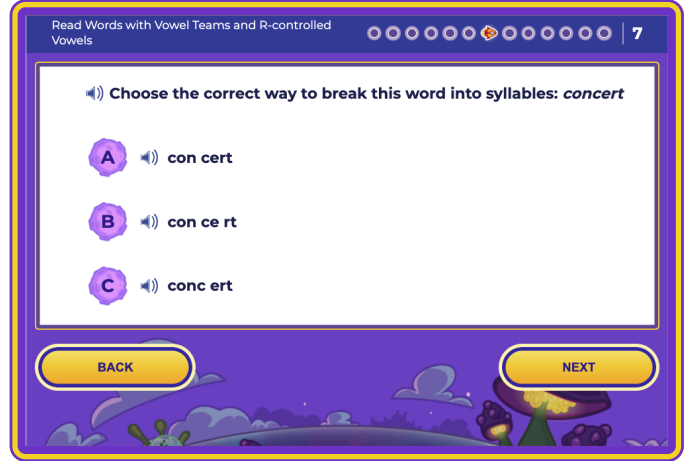
I can point to each word being read aloud.

2 - Print Concepts

I can point to the letters in words and identify them as letters.

Observe students as you read and record in the [Observation checklist for Unit 1, Module 2, Lesson 4](#).

Instructional Videos and Interactive Practice



Engaging videos and complementary interactive practice for each skill can be used flexibly to reinforce instruction and support students with repeated practice with a skill.

Encoding Resources

Foundations A-Z Grapheme Cards
Unit 8 • Module 3

a	air	are	c
ch	e	nch	ou
p	qu	r	s
sh	t	tch	th
wr			

© Learning A-Z. All rights reserved. www.learninga-z.com

Foundations A-Z Phoneme/Grapheme Mapping Paper

© Learning A-Z. All rights reserved. www.learninga-z.com

Students apply phonics knowledge when building and manipulating words, as well as when encoding words to build and expand understanding of how words work. Students match phonemes to graphemes using student resources, including grapheme cards and phoneme/grapheme mapping paper.

High-Frequency Words

High-frequency words are the regular and irregular words that occur most often in texts. High-frequency word instruction helps students read connected texts before they have learned all the sound-spelling correspondences in these common words through their phonics scope and sequence. Some high-frequency words are permanently irregular because they don't follow common sound-spelling patterns, so teachers must instruct students on how to read them. High-frequency word automaticity leads to more fluent reading, and fluency promotes comprehension. Several well-known lists of high-frequency words help educators know the most useful words to target during instruction:

- The Dolch Basic Sight Vocabulary list, compiled by reading scholar Edward Dolch, contains 220 frequently used words.
- 1000 Instant Words, compiled by professor of education Edward Fry, contains one thousand frequently used words.
- EDL Core Vocabularies in Reading, Mathematics, Science, and Social Studies, published by Educational Developmental Laboratories, is a list of content-area vocabulary.

The Research

- Thirteen words make up about 25 percent of all the words in texts (Johns & Lenski, 2019), and three hundred most frequent words make up about 65 percent of the words in texts (Fry, 2000).
- High-frequency word instruction should be a part of a systematic phonics curriculum with explicit instruction on decoding and encoding each word that follows typical sound-spelling patterns (Berg, 2017; Ehri, 2005, 2014).
- Words are not learned via visual memory; they must be stored using sound-spelling correspondences, which ensures that orthographic mapping and automaticity occur (Ehri, 2005).
- Many high-frequency words are decodable if sequenced appropriately within a phonics curriculum. The same instructional approach can be used with high-frequency words containing irregular sound spellings, if those irregularities are noted and addressed (Ehri, 2005).
- Irregular high-frequency words are more challenging for students to learn than regular words, and it takes them more time to achieve automatic recognition, so they must be taught with explicit instruction and repeated exposure (Carnine et al., 2006).

Foundations A–Z Research-Based Solutions

In Foundations A–Z, high-frequency words are strategically selected to prioritize the most common words in English to support students' reading and writing.

- In grades K–2, high-frequency words come from the Dolch and Fry word lists. Consistent multimodal instructional routines are used to teach each word to ensure automaticity, and students encounter them in connected texts within the same module in which they are introduced. Practice sheets and flash cards offer repeated practice.
- Grade K students learn the most frequent words early in the year as they learn the letters in the alphabet and phoneme-grapheme correspondences.

- Words chosen for grades K–2 are sequenced by frequency and whether their spellings are entirely regular (decodable), temporarily irregular because students have not yet learned the spelling pattern, or permanently irregular. Often, the words highlight the sound-spelling correspondences that students are learning in the same lesson.
- High-frequency words in grades 3–5 were drawn from the Fry and the EDL lists, with a focus on academic language and content-area vocabulary. Many include morphemes explicitly taught as part of word study.

Grade 1 Lesson Plan

High-Frequency Word: *Were*

3 mins

1. **Introduce** the high-frequency word *were* using [High-frequency word flash cards](#). Introduce the word by saying it, explaining the word's meaning, using it in a sentence, and spelling the word aloud. The following definition is provided for **your** reference: **were:** (*v.*) the past tense of are, used in the plural and second-person singular.

The instructional routine to teach irregular high-frequency words stresses introducing each word and its meaning, in addition to seeing, saying, sounding out, and spelling each word.

✓ [Sample Dialogue](#)

We've learned about breaking words down into their sounds and blending them together to read them. There are some words, however, that you can't do that for because their letters sound different than what you would expect. We call these "heart words" because you have to remember them by heart. When we learn something "by heart," it means that we memorize it, or repeat it enough times that it is easy to remember. Let's look at this high-frequency word: *were*.

2. **See it:** Have students locate [High-frequency word flash cards](#) in their pile.

Irregular high-frequency words are treated differently than regular high-frequency words, so instruction focuses on the word part students must learn by heart.

➤ [Sample Dialogue](#)

3. **Say It:** Pronounce the word with them several times, correcting mispronunciation immediately. Explain that this is a word that we need to learn by heart.

➤ [Sample Dialogue](#)

4. **Sound It:** Break the word into its individual sounds using Four-sound box workmat. Have students touch each box as they say the sound.

➤ [Sample Dialogue](#)

5. **Spell It:** Direct students to use Grapheme cards and [Four-sound box workmat](#) to spell the word *were*. Guide them to mark the irregular pattern in the word with the heart cards.

✓ [Sample Dialogue](#)

Now, we're going to spell the word using our grapheme cards. The first letter sound is /w/. Which letter spells the sound /w/? (*w*) That's right, the letter *w* spells the /w/ sound. Place *w* in the first box on your workmat. The next sound in the word is /ŭ/. Let's look at the spelling on the board. The next letter is *e*, then *r*, and then a final *e*. A final *e* usually makes a vowel sound long, but in this word

The high-frequency word sequence is designed to highlight the sound spellings that students are learning in phonics. The approach uses consistent instructional routines for both regular and irregular high-frequency word instruction to encourage students to use what they know to identify the regular parts of each word. Here, students use phoneme-grapheme cards to spell irregular high-frequency words.

Grade 1 Student Resources

Foundations A-Z High-Frequency Word Flash Cards Unit 1

one	once
step	still
stop	were

© Learning A-Z All rights reserved. Learning A-Z www.learninga-z.com

Students use high-frequency word flash cards to practice reading and discussing the high-frequency words in each unit.

Foundations A-Z High-Frequency Words Practice Sheet Unit 1 - Module 1

Name _____ Date _____

box	dog	its
name	were	

- I wish I had a _____, too.
- What is in the big _____?
- The fox digs _____ den.
- The cakes _____ made by Jin.
- I have a cat, and his _____ is Pat.

Instructions: Have students use the words provided to complete the sentences. Have students write their own sentence using one of the words on the back or on a separate piece of paper. If time allows, have students read the sentences to a partner.

© Learning A-Z All rights reserved. Learning A-Z www.learninga-z.com

There are many ways students practice reading and writing high-frequency words. In this example, students complete sentence frames, with teacher support, focusing on understanding that academic language has multiple meanings. Then students work collaboratively with peers to write and review their own sentences containing these high-frequency classroom words.

Word Analysis (Word Study and Morphology)

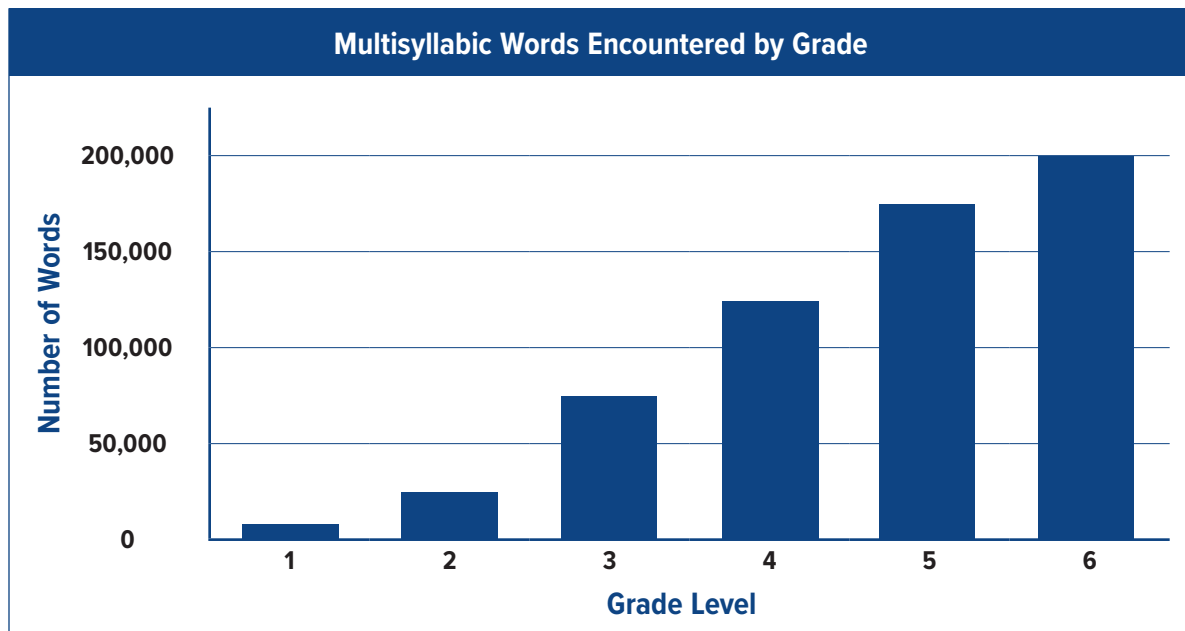
Word analysis includes word study and morphology. Students learn about word parts and forms, and words' relationships to each other, this includes pronunciation, spelling, and meaning. The instructional focus shifts from phonemes (the smallest units of sound) to morphemes (the smallest meaningful "chunks" of words and their functions). Whereas high-frequency word instruction focuses mainly on Tier 1 words, explicit instruction in morphology focuses on Tier 2 and Tier 3 words, building orthographic knowledge that supports decoding and encoding longer and more complex words.

Tier 1	These are words of everyday speech, usually learned in the early grades. They are not usually the focus of in-depth morphology instruction.
Tier 2	These are words that comprise general academic language, appearing in texts across a variety of subject areas. They are often words that have multiple meanings and should be taught in depth.
Tier 3	These are low-frequency words specific to a field of study and common in informational texts. These words are essential to learning content and should be taught in depth.

Adapted from *Bringing Words to Life* (Beck et al., 2002).

The Research

- In a comprehensive review of the research, Bowers et al. (2010) conclude that word analysis, especially morphology instruction, benefits all learners, including younger students, and especially less proficient readers. By promoting word awareness, morphology instruction provides tools and strategies for correctly reading and interpreting words. These include semantic mapping, categorizing, analyzing word features, and linking to known synonyms and antonyms.
- There is no universally prescribed order for teaching roots and affixes. Rasinski et al. (2020) note, however, that an instructional scope and sequence should present roots and affixes by considering the following criteria:
 - Which morphemes appear in language arts and content-area curricula?
 - Which word parts appear most frequently in everyday English?
 - Which word parts have the greatest instructional value or utility?
- Research suggests that morphology instruction, delivered in tandem with phonics instruction, is a productive and efficient way to improve students' vocabularies, especially for academic words (Rasinski, 2021). Roots and affixes form a schema upon which students can build knowledge and understanding. Moats (2007) advocates using compound words and inflectional endings in the primary grades to reinforce the concept that word parts having meaning.
- Learning just one morpheme can provide students with a tool for determining, at least partially, the meaning of twenty to thirty, and in some cases, more than one hundred English words (Rasinski, 2021).
- Learning about words in groups from a related knowledge network strongly supports students' comprehension and ability to make inferences (Neuman & Wright, 2014).



As students move up in grade, the number of polysyllabic words encountered per year increases, dramatically making reading increasingly more challenging. (Kearns et al., 2016; Zeno et al., 1995).

Foundations A–Z Research-Based Solutions

Word study instruction in Foundations A–Z is based on a comprehensive scope and sequence that progresses from simple to more complex morphological patterns and incorporates frequent and regular spiral review. The sequence of morphemes is informed by the topics and questions covered in each module as well as grade-level texts.

- Grades K–2 instruction starts by analyzing the bases of words that are likely already in students’ oral vocabulary and identifying other members of the morpheme family.
- Word study lessons in Foundations A–Z take an organic, developmental approach. In line with research, instruction in grades K and 1 builds on how students use word parts, such as plural forms and inflectional endings, in their speech. In later grades, lessons present other morphological and orthographic concepts, moving from simple to more complex based on concepts central to classroom texts used.
- Lessons reinforce word parts as meaningful units, moving from familiar forms such as compound words to more complex and content-specific roots and affixes. Students gain practice using morphemes to decode and encode multisyllabic words while attending to phonological components inherent to those words. They develop an orthographic and morphologic schema that advances comprehension.
- Students apply what they have learned in word study with words in isolation and by reading phrases, sentences, and texts in a variety of genres. Students also apply what they have learned in word study through encoding as they build, spell, sort, and write words.

Sample Word Study Skills Focus for One Module Across Grades	
Grade K	Understand and use interrogatives: <i>who, what, where, when, why, how.</i>
Grade 1	Review regular plural form inflectional endings* -s, -es.
Grade 2	Review closed compound word families: <i>firehouse, schoolhouse, housework, houseboat.</i>
Grade 3	Introduce homophones: <i>flower/flour, dear/deer, cent/scent/sent.</i>
Grade 4	Combine roots <i>phon, photo, graph</i> to form words (<i>phonograph, photograph</i>). Introduce roots <i>ver</i> (truth) and <i>dict</i> (say) (<i>verdict</i>).
Grade 5	Introduce greek root <i>hydr</i> (water) and Latin root <i>aqua</i> (water) (<i>hydroelectric, aquatic</i>). Introduce prefix <i>de-</i> (off) and derivational suffix** - <i>gen</i> (that which produces) (<i>hydrogen, dehydrate, antigen</i>).

* no change in word’s part of speech ** impacts word’s part of speech

Grade 5 Lesson Plan and Student Resource

Word Study: Introduce Latin Root *aud* (to hear)

5 mins

1. **Write** the following sentence on the board: *A rustling sound was audible in the woods.* Underline the word *audible* and circle the Latin root *aud*. Explain the meaning of the root and how it gives meaning to the word.

✓ Sample Dialogue

Look at this sentence as I read it aloud: *A rustling sound was audible in the woods.* This word, *audible*, might be new to you. It has the Latin root *aud*, which means to hear. Something that is *audible* is something that is able to be heard. In this sentence, a rustling sound was *audible*.

2. **Present** another word with the Latin root *aud*: *audience*. Work through the word with students to identify the roots and syllables and to determine the word's meaning. Write the word *audience* on the board.


✓ Sample Dialogue

Let's look at some other words with the Latin root *aud* to see how knowing the root can help us decode and understand words. The root *aud* appears at the beginning of this word. The root *aud* tells me the word has something to do with hearing or listening. We can use what we know about syllables to read the rest of this word. In this word, the *i* and *e* are not a vowel team; they each make their own sounds. The spelling pattern I see at the end of the word means the *c* sounds like *s*, followed by a silent *e*: *aud-i-ence*. This word is *audience*, which is a group of people who listen to a performance.


Foundations A-Z **Root Practice Sheet**
Unit 2 • Module 1

Name _____ Date _____

Instructions: Read each sentence. Underline the words with the root *aud*. Then circle the root in those words.

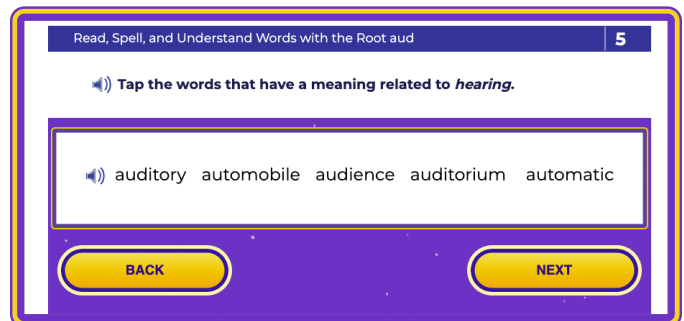
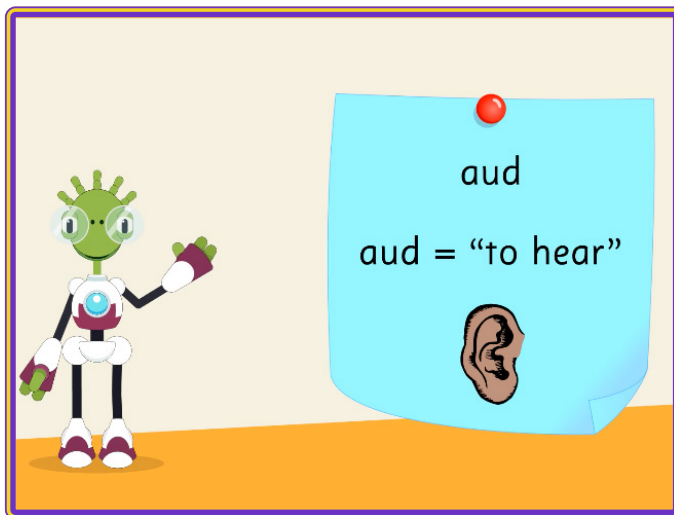


- ① The audience applauded when the movie ended.
- ② The actor was nervous before his audition for the show.
- ③ The music was inaudible, because the tablet's battery was low.
- ④ The auditory nerves carry sound signals.
- ⑤ Every seat in the auditorium was occupied.
- ⑥ We listened to an audiobook on the car ride home.
- ⑦ The auditor considered each presentation and gave his opinion based on what he heard.
- ⑧ The audiovisual department is in charge of sound and lighting for school productions.
- ⑨ An audiometer is a device used to measure how well someone hears.
- ⑩ The frightened dog's pounding heartbeat was almost audible.

© Learning A-Z. All rights reserved. 

Word study lessons ensure students practice reading words that contain roots learned and offer students opportunities to determine the words' meanings based on the meaning of the roots or affixes learned.

Instructional Videos and Interactive Practice



Students also have the opportunity to practice morphology learned in the lessons via their digital portal. These include student instructional videos and interactivities.

Language Connection

Understanding the basics of how one's language works is a prerequisite for school readiness and learning to read. Scarborough (2001) provides a clear representation of how various subskills of language comprehension interweave with subskills of word recognition to develop students' reading fluency and comprehension. Sound instruction builds on this interrelationship by providing opportunities for ongoing language development along with foundational skills practice.

The Research

- The rules governing spoken language acquired naturally must be broken down and explained in order for students to understand how they work with the visual representation of language. For novice readers, this should occur in tandem with decoding instruction, since both decoding and language comprehension are required for fluent reading (Gough & Tunmer, 1986).
- Vocabulary research shows the benefits of explicit teaching over implicit teaching in vocabulary development (Butler et al., 2010).
- Multiple studies show that emerging readers in the primary grades benefit from integrated decoding and encoding instruction that incorporates spelling (Weiser & Mathes, 2011).
- Regular, systematic instruction in grammar, handwriting, spelling, and punctuation, along with structured opportunities to apply those skills through writing exercises, is critical to helping students develop greater understanding of paragraph formation and narrative and expository text structures (Moats, 2007).

Foundations A–Z Research-Based Solutions

Language instruction is embedded in all Foundations A–Z lessons. Language competency develops in tandem with learning foundational phonics and word study skills. Lessons include frequent and regular spiral review of language basics integrated with explicit instruction of other foundational elements such as decoding.

- Instruction emphasizes oral expression, such as using syntax to form complete sentences when talking or writing about texts, applying the mechanics of handwriting and spelling, and recognizing and using new vocabulary.
- High-frequency words and content-area vocabulary are discussed and featured in context sentences to reinforce their meaning. Spelling dictation reinforces grapheme-phoneme correspondence and helps build automatic word recognition and recall. The role of spelling is reinforced through collaborative word building and spelling dictation.
- Writing activities allow students to apply what they have learned by spelling and using words in context to respond to the module or unit questions.
- Throughout all lessons, students learn to be mindful and attentive to the ways in which they and their peers use language to express their ideas, thus advancing their pragmatic use of language and fostering development of linguistic proficiency inside and outside of the classroom.

Grade K Lesson Plan

In this kindergarten lesson, the teacher and students focus on answering questions using *who, what, where, when, why* and *how*.

Language Connection: Return to Module Question

5 mins

1. **Display** the module question to students: How can we show kindness to others?
2. **Connect** the text with what is being learned in phonics and the decodable book. Model asking and answering questions in complete sentences.
> [Sample Dialogue](#)
3. **Collaborative Practice:** Write the question words on the board and have students work in small groups to think of questions they can ask about kindness. Have them call on someone in the group to answer the question with a complete sentence. Have the other students in the group listen for complete sentences in the questions and the answers. After a few minutes of discussion, call on volunteers to share with the class.

Check for Understanding

11 - Language Connection
I can speak in complete sentences.

12 - Language Connection
I can ask questions using who, what, where, when, why, how.

Observe students during the collaborative practice. Record in the [Observation checklist for Unit 5, Module 4, Lesson 2](#).

**See Reteach/Enrich section for follow-up activities if needed.

Grade 2 Lesson Plan

The Write About It! exercises in each module afford students opportunities to practice grammar, handwriting, and spelling.

Write About It! Shared Writing Activity

15 mins

1. **Write** this module's high-frequency words on the board. Choose four to six words from [Decodable book: "The Hopeful Man and the Sea"](#) that are exemplars of this module's phonics/word study skills, and write those words on the board as well. (See the list of target skills and words at the end of the book.) Explain that these are words students have learned in this module and read in [Decodable book: "The Hopeful Man and the Sea"](#). Read and spell the high-frequency words and exemplar words chorally with students. Remind students of the words' meanings. Point out this module's target phonics/word study elements in the exemplars and briefly remind students what they have learned about them.
2. **Project** the [Wordless decodable book: "The Hopeful Man and the Sea"](#). Inform students that today they will work together as a class to write the words for the book. Remind students of the skills they have learned in this module and note that they should apply what they have learned as they write.

✓ [Sample Dialogue](#)

We have practiced how to read and write words with vowel teams, words with suffixes, regular and irregular plural nouns, and regular and irregular past-tense verbs. Today, we will use these skills to write a story together. Remember, in the stories we read this week, there were characters, settings,

Lesson plans throughout the grades allow students to understand how language works as students engage in discussions and writing exercises.

Fluency

Fluency is the ability to read with accuracy, automaticity, appropriate rate, and prosody. All four aspects are essential to reading comprehension. Often, teachers and students mistakenly focus solely on accuracy and rate, equating fluency with reading a target number of words per minute. Fluency is actually a multidimensional ability that combines a number of different subskills.

The Research


- The goal of fluency is to get students to the point where they automatically recognize most of the words they encounter, so they can devote their attention to making meaning (Rasinski, 2019).
- Reading at an appropriate rate, or pace, is essential to comprehension. A rate that is too slow (usually due to labored decoding) hinders comprehension, as does reading too quickly (Rasinski, 2004).
- Reading with prosody means reading with meaningful expression (Dowhower, 1991). Students should practice prosody even when reading silently (Gross et al., 2013).
- Poor prosody has been shown to predict poor comprehension, even when students' decoding skills were the same (Groen et al., 2019).

Foundations A–Z Research-Based Solutions

Listening to fluent reading modeled daily, practicing repeated readings, and reading a variety of texts all lead to improved fluency. Foundations A–Z provides explicit instruction in fluency skills and opportunities for students to practice fluent reading throughout a module.

- Early grade K focuses on accuracy and automaticity, beginning with letter names and sounds and progressing to words and emergent reader texts.
- In the first half of grade 1, students practice self-correction in fluency activities and through reading texts. In the second half of grade 1, reading rate, phrasing, intonation, and stress are added to the mix.
- Longer, more robust grade-level texts in grades 2 and 3 provide multiple opportunities for students to hear fluent reading modeled and to practice it through reading routines, such as echo reading, choral reading, partner reading, and whisper reading.
- Lessons and texts in grades 4 and 5 enable targeted, explicit fluency instruction. Teachers use examples and excerpts from the grade-level texts in each module to explain and model characteristics of fluent reading. Students bring all learned fluency strategies to bear through repeated reading of performance-oriented texts at the end of the module.

🔊 Drag the happy face to the letter that has this name. Listen:



A

P

Letter Names and Sounds

🔊 Listen to the word. Drag the letters onto the lines to spell the word.

🔊 o 🔊 p 🔊 t


🔊

🔊 p

Words

🔊 Tap the button to record. Then read the sentence out loud.

His pot has a lid.



Emergent Text

Grade 1 Shared Reader: *Fuzzy Buzzy Bee*



It's a morning
filled with sun,
Fuzzy Buzzy Bee.



I'll follow you and
have some fun,
Fuzzy Buzzy Bee.

Fuzzy Buzzy Bee | Shared Reading

3

You leave your hive
and it's a race,
Fuzzy Buzzy Bee.




Nectar and pollen are
all over the place,
Fuzzy Buzzy Bee.

Fuzzy Buzzy Bee | Shared Reading

5


Teachers model fluent reading using rich, engaging texts.

Grade 2 Grade-Level Text: *What's Up with Pop?*



What's Up with Pop?

It's Saturday morning.
I am going to drop.
I want to stay home,
not shop with my pop.



I get in the car
next to Joe in his booster.
At this time of day,
I hear only a rooster.


While driving along,
I'm starting to fret
when Pop yells out loud,
"Why aren't we there yet?"

© Learning A-Z. All rights reserved.

1

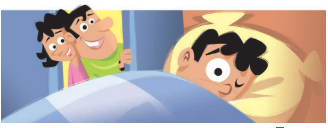
We get to the mall.
I am just floored
when Pop looks around
and says, "I am bored."

At the pet store,
we get food for our cat.
Pop points left and right,
saying, "Can I have that?"



That night in my room
I am nodding my head.
I hear Pop say to Mom,
"I'm not going to bed!"

Then Pop and Mom open
my door and look in.
"Think he gets it yet?"
Pop asks Mom with a grin.



www.learninga-z.com

2

Learning A-Z

Using genres such as poetry or drama develops fluency through choral reading.

Grade 5 Lesson Plan

In this grade 5 lesson plan, students learn about expression and phrasing, listen to the teacher model these aspects of fluency, and practice reading fluently.

Fluency: Reading with Expression and Phrasing

5 mins

- 1. Introduce** the concept of “voice” and its relationship to reading with expression and phrasing. Explain that first-person text is written from the writer’s point of view; it features the pronouns “I,” “we,” and “us.” Second-person text features the pronoun “you” or hints at “you.” First-person text feels like someone is telling a story to an audience. Second-person text makes readers feel like they’re in a conversation with the author, as if the text is speaking directly to them. Provide examples to illustrate the difference. Tell students readers use different expression and phrasing for each type of text.
 - › [Sample Dialogue](#)
- 2. Refer** students to page 22 in [Grade-level text: *Microbes: Friend or Foe?*](#). Reread the last sentence, using appropriate narrative phrasing as indicated by punctuation. Ask students which type of text this is and how they know. (Feels like someone telling a story; it uses the word “we.”)
- 3. Repeat** with the first paragraph under “Outdoor Safety.” Read with a direct, serious tone as if addressing someone. Tell students that the word “you” makes it feel as if the text is speaking directly to them to give instructions.
 - › [Sample Dialogue](#)
- 4. Direct** students’ attention to “Don’t Spread Disease” on page 20. Point out use of the second-person pronoun “you” and how the text seems to be directed toward the reader. Then reread the page aloud with students.

Fluency Resources for Teachers

Fluency Rubric
🔒 ⌵

Points	Accuracy	Automaticity	Prosody
1	<ul style="list-style-type: none"> Pronounces very few words correctly. Stops after every couple of words to analyze and decode unknown words. 	<ul style="list-style-type: none"> Recognizes few words automatically. Reads with a lot of effort. Needs to stop frequently to focus on decoding. 	<ul style="list-style-type: none"> Reads in monotone without expression. Reads word-by-word with no acknowledgement of punctuation. The reading sounds unnatural and unlike spoken language.
2	<ul style="list-style-type: none"> Pronounces some words correctly. Stops often to analyze and decode unknown words. 	<ul style="list-style-type: none"> Recognizes many words automatically. Reads with some effort. Needs to stop quite often to focus on decoding. 	<ul style="list-style-type: none"> Reads with Reads word acknowledg The reading not much li
3	<ul style="list-style-type: none"> Pronounces many words correctly. Stops intermittently to analyze and decode words. 	<ul style="list-style-type: none"> Recognizes many words automatically. Reads with little effort. Needs to stop a few times to focus on decoding. 	<ul style="list-style-type: none"> Reads with Pauses for Emphasize The reading approaches
4	<ul style="list-style-type: none"> Pronounces all or almost all words correctly. 	<ul style="list-style-type: none"> Recognizes all or almost all words automatically. 	<ul style="list-style-type: none"> Reads effort Pauses for c

Self-correction Strategies
🔒 ⌵

Reading Skill Process	Prompts to Self-Correct
Decode: Connect phonemes to graphemes and blend the sounds to decode the words.	<ol style="list-style-type: none"> Look at the word: Show students how to connect the graphemes to the phonemes. Slide through the word: Show students how to decode grapheme by grapheme. Flip the sound: Many vowels can represent more than one sound, so show students how to be flexible and flip the sound. This is called <i>vowel flexing</i>. Break words into parts: Show students how to break words into smaller parts, such as the two smaller words in a compound word or into affixes and base or root words
Fix Language: Does it make sense and sound right?	<ol style="list-style-type: none"> Question themselves: Have students ask themselves, Does it make sense? Does it sound right? Wait time: Allow students the opportunity to figure out the mistake and self-correct. Reread: Allow students to reread the text to help them self-correct.
Vocabulary: Determine the meaning of words based on prior knowledge and context clues.	<ol style="list-style-type: none"> Think about meaning: Remind students to think about the word in relation to its meaning. Context clues: Allow students to use the clues around the word to decipher its meaning. Word parts: Allow students to use the parts of the word that they know, such as affixes and bases or roots.

CLOSE

Teachers use the fluency rubric and teach self-correction strategies to help students monitor and correct all aspects of fluency.

Decodable Books and Beyond

Students should practice learning to read using texts that allow them to experience success and develop confidence in their reading abilities. Decodable books are intentionally written with an emphasis on words that students can read based on their cumulative knowledge of phonics elements and pretaught high-frequency words. They are defined by a high degree of phonics regularity and lesson-to-text match.

The Research

- Evidence clearly supports the benefits of using decodable texts to support early reading (Cheatham & Allor, 2012). Decodable texts are most beneficial during beginning reading phases when students are learning basic phoneme-grapheme relationships and starting to decode words that follow predictable patterns (Mesmer, 2000).
- The successful use of decodable texts relies on three important factors: phonological awareness, phoneme-grapheme knowledge, and the ability to use context to confirm approximations of words produced by early decoding (Share, 1995).
- Readers at the beginning stages of acquiring phoneme-grapheme knowledge benefit from explicit instruction and repeated opportunities to apply their developing knowledge in an authentic context (Wharton-McDonald, 2018).
- While not restricting emerging readers to decodable texts, such texts should be a mainstay of early reading instruction (Duke & Mesmer, 2019).
- An effective routine for reading and rereading decodable texts for different purposes, including comprehension, contributes to the success of phonics instruction (Blevins, 2017).

Foundations A–Z Research-Based Solutions

In Foundations A–Z, students apply their cumulative knowledge from phonics, word study, and high-frequency words instruction through repeated readings of decodable books in grades K–2 and word study passages in grades 3–5.

- Foundations A–Z decodable books follow each grade’s scope and sequence, so students can apply what they have learned during previous phonics and high-frequency word instruction to read connected text, make meaning, and build fluency.
- Foundations A–Z decodable books go beyond providing practice in decoding and fluency. The collection of books consists of cohesive fiction and nonfiction texts with engaging storylines and visually stimulating images that expose students to a variety of topics.
- In grades 3–5 of Foundations A–Z, students transition from decodable books to the more mature format of word study passages, which consist of four related articles per passage. Each word study passage includes one fiction text, one nonfiction text, one short fluency piece suited to choral reading or performance, and one graphic feature or sidebar for extended learning.
- A consistent instructional routine for engaging with each decodable book through three readings mirrors the gradual release model in phonics lessons. With each reading, students take more responsibility for reading the book independently, while the teacher monitors and suggests self-correction strategies as needed, and the routine culminates with a class discussion as a comprehension check.
- Fluency checks are embedded in lessons to help track and monitor fluency progress during repeated readings of decodable books and word study passages.

Grade K Decodable Book: *The Fun Play*



Jen sat and had a bun.
 "This bun is too hot!"
 Jen said.
 "And this bun has
 a bug on it!"

The Fun Play

5

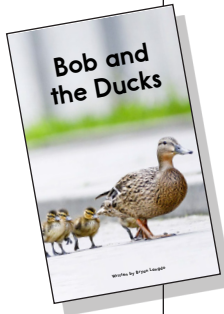


But the next bun did not.
 "Yum! Not bad!"
 Jen had ten buns
 with jam on top.

6

These pages show repeated instances of the module's focus on the sound spelling of CVC words with short *u* and review with other short vowels, as well as the module's high-frequency words.

Grade 1 Decodable Book: *Bob and the Ducks*



Robert (Bob) McCloskey



Bob has a job
 that makes him glad.
 He draws his tales
 on to a pad.

Bob and the Ducks

3



Bob drew a tale
 about some ducks.
 The ducks make cars
 and trucks get stuck.

4

A wide variety of fiction and nonfiction texts support student engagement and interest in worthwhile topics.

INSTRUCTIONAL FOCUS CHART

Target Phonics Skills and Related Decodable Words:

CVC words with short *u*; closed syllables; phonograms -en, -un

Ben, bug, bun, but, den, fun, Jen, run, ten, yum

Spiral Review Focus and Related Decodable Words:

CVC words with short *a*, short *e*, short *i*, short *o*

bad, bed, big, can, got, hid, hot, jam, Jan, Lin, nap, not, ran, red, sat, top

New High-Frequency Words:

*regular words (decodable); *irregular words

**ship, they, when, which, who*

Story Words:

bear, buns, play

An instructional focus chart is included with each decodable book to group words from the text with the target skill focus, words with patterns taught in previous modules, new high-frequency words from the module, and story words that are not yet decodable and require teacher support. As teachers observe students reading the text, this helpful reference tool can be used to identify additional skill instruction that students may need if they struggle with particular words.

Comparing Geography

By Joanne Mattern



Mirror of the Sky

“Welcome to Bolivia’s Salar de Uyuni (sah-LAR DEH oo-YOO-nee!)” said the guide. “This is the world’s largest salt flat.”

Felipe couldn’t believe his eyes. It contradicted everything he thought he knew about Bolivia’s land. “I pictured nothing but rugged mountains,” Felipe told his mom.

“Long ago,” the guide continued, “a lake dried up, leaving a thick layer of salt. Now when nearby lakes overflow onto the salt flat, the surface of the water reflects the sky like a mirror.”

“Mom,” said Felipe, “I’m so glad you reminded me to bring my portable drone. I should get a photo of this amazing formation from above!”

Rainforests Versus Deserts		
	Tropical Rainforests	Deserts
Rainforests and deserts differ in many ways! Let’s compare their differences:		
Amount of rainfall per year	80 to 400 inches (200–1,000 cm)	0 to 12 inches (0–30 cm)
Climate	Hot and wet	Hot or cold and dry
Plant life	Tall, leafy plants with strong roots	Short plants with small or no leaves and deep roots
Blooming season	All year long	Seasonal
Animal life	Many large animals	Fewer large animals

© Learning A–Z All rights reserved.

1

Mighty Mountains

Mountains form when sections of Earth’s crust, or plates, move. These movements form three types of mountains—fold, block, and volcanic. Fold mountains develop when two plates crash, forcing Earth’s crust to crumble and fold. A block mountain forms when plates push against each other, projecting some rock up and some down. The third mountain, the volcanic mountain, has two types. The first occurs when hot liquid rock from deep under the ground pushes up through Earth’s surface. This liquid rock hardens and builds up to form a volcano. The second occurs when liquid rock pushes Earth’s crust out, but hardens before breaking through.



Interview with an Explorer

Interviewer: We’re talking to explorer George Forrest. George, what is your favorite geographical feature?

George: I love rivers because they’re so vital. They’re home to many creatures and provide transportation routes and shipping ports. Every river is different. Some, like the Amazon River, flow very fast. It can pour approximately 58 million gallons (220 million l) of water into the ocean every second!

Interviewer: Wow! What’s the slowest?

George: The water in the Everglades. It moves about 3 feet (.9 m) per hour!

Interviewer: What’s something people might not know about rivers?

George: Many people think all rivers flow from north to south. That’s not true! Some flow east to west. Rivers are full of surprises!

Credits: © Dave Allen Photography/Shutterstock
www.learninga-z.com

2



A word study passage features exemplars of the module’s phonics and/or word study elements as well as high-frequency words. The magazine-style design includes short fiction and nonfiction articles, a fluency text, and a graphic feature or sidebar for extended learning.



DOWNLOAD

PRESENT

ASSIGN

Comparing Geography

Word Study Passages | Passages | Grade 3

Overview

This word study passage is about the many different geographical features in our world.

Word Study:

- Base words (morphemes that can stand on their own): *form, like*
- Common Latin roots (dict, fer, form, ject, port): *contradicted, differ, different, formation, portable, projecting, transportation*

Passage Vocabulary:

dome, geographical, formation, projecting, rugged, surface

Content High-Frequency Words:

difference, land, mountain, north, river, south

An overview of the phonics and morphological elements, as well as the vocabulary and high-frequency words, is provided with each word study passage for teacher reference.

Reading and Listening to Complex Texts

Learning and practicing skills through explicit and systematic instruction is only the first step on the road to reading proficiency. With exposure and access to a variety of diverse, complex texts, students have the necessary resources to apply those skills in authentic contexts, as well as to build topic knowledge, develop reading comprehension skills and fluency, and inspire a love of reading.

The Research

- Studies support that engaging students with robust, meaningful texts from the very start of their education reinforces purposeful reading (Houck & Ross, 2012).
- Modeling how to read with appropriate fluency and prosody showcases key skills and strategies novice readers must use to process more complex reading materials independently. Vocabulary, listening comprehension, story schema, and word recognition are just a few of the areas that show gains with effective read-aloud sessions (Allington & Gabriel, 2012).
- Having domain and background knowledge about a topic supports fluency and comprehension because it helps students make rapid connections between what they already know and what they are reading (Hirsch, 2003).
- Conceptually rich grade-level books on wide-ranging subjects and in a variety of genres spark interest and offer opportunities for students to apply new foundational skills in context (Foorman et al., 2016). Building a body of knowledge using multiple texts supports later learning and the retention of new knowledge (Cromley & Azevedo, 2007; Ozuru et al., 2009).
- Providing high-quality authentic texts and explicit skills instruction gives students the competency and agency to pursue their own reading interests (Guthrie et al., 2006).

Foundations A–Z Research-Based Solutions

The Foundations A–Z program includes rich, complex texts that are used as shared readers in grades K and 1 and grade-level texts in grades 2–5. These grade-appropriate texts represent a variety of topics and genres and were selected after careful consideration of quantitative and qualitative factors.

- The complex texts in each unit are focused on a content-area topic to support knowledge building and constructing meaning as students engage with the texts.
- Students work with shared readers and grade-level texts linked to a specific module question designed to spark inquiry about the module topic and support knowledge building. The module question is introduced and reviewed at the start of each lesson and establishes a purpose for reading that motivates students to apply the skills they have learned to find an answer.
- Shared readers at grades K and 1 are beyond students' ability to decode independently. The teacher reads them aloud to model fluency and to demonstrate how text features like punctuation cue expressive reading.
- Each unit's scaffolded lessons support reading texts with gradually increasing complexity and culminate with a whole-group activity to craft a response to the unit question. This response has students synthesizing knowledge and skills gained across all modules.

Topic Knowledge Focus by Unit

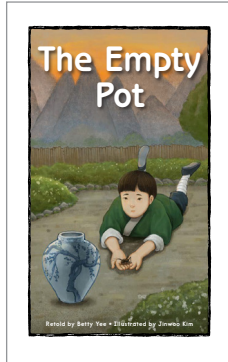
	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Unit 1	What is a community?	What are the rights and responsibilities of people in a community?	What is the role of government in people's lives?	How can people make a difference?	What are the three branches of government, and how do they work?	What events helped shape the United States, and how did the leaders of these events make an impact?
Unit 2	What are the important parts of a story?	What are the elements of a story?	How do characters respond to events and challenges?	How do stories help us learn about ourselves?	How do specific details about story elements deepen our understanding of a text?	How do authors develop characters who change and interact throughout a story?
Unit 3	Why and how do objects move?	What do we know about light and sound?	Where can you see the effects of motion?	How have discoveries about energy changed our world?	Why are different types of energy important to our lives?	How do we use what we know about energy and objects to develop scientific innovations and inventions?
Unit 4	What are some different kinds of art, and why is art important?	What is art, and where do we find it?	How does art help people express their feelings and ideas?	What is art, and why is it created?	How does art differ around the world?	How and why have the arts changed over time?
Unit 5	Why is it important to make good choices?	How does doing the right thing affect yourself and others?	What qualities are important in a person?	What does it take to have a meaningful relationship?	What are the qualities of a good citizen, and why is it important to be a good citizen?	How does having strong self-management and self-awareness make things better for ourselves and the world around us?
Unit 6	How are living things similar and different from each other?	How can living things survive?	How do living things interact with their environment?	How do living things depend on their environment?	What is the relationship between living things and their environment?	What scientific knowledge helps us support and sustain life?
Unit 7	What kind of places do people go to, and how do they get there?	What can we learn about different people and places around the world?	How can we learn about different cultures around the world?	Why is it important to study geography and cultures?	Why is it valuable to learn about people and places from the present and past on a global scale?	How and why have people, goods, and ideas moved around the world throughout history?
Unit 8	What do we know about our world?	What can we learn about Earth, and how is Earth special?	What is the relationship between Earth and space?	Why is it important to learn about Earth and space?	How do people interact with and depend on the world around them and beyond?	How do people impact planet Earth and beyond?

Students deepen their topic knowledge through the lens of different texts within and across grades.

Scaffolded Knowledge and Skill Building, Grade 1, Unit 5

Module 1 Question

What does it mean to be honest?



Module 2 Question

Why are manners important?

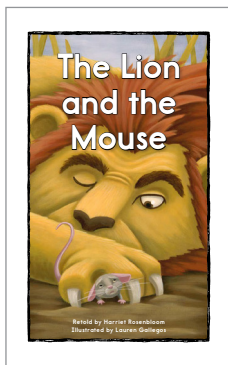


Unit 5 Question

How does doing the right thing affect yourself and others?

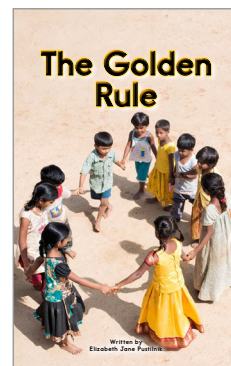
Module 3 Question

What are some kinds of feelings, and how can they change?



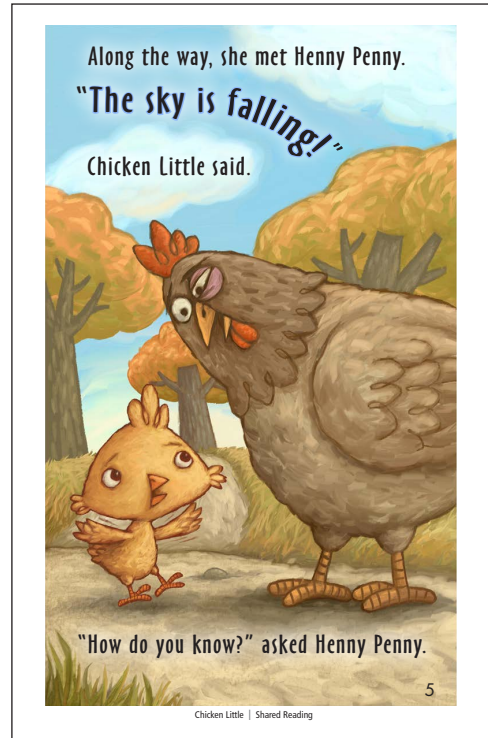
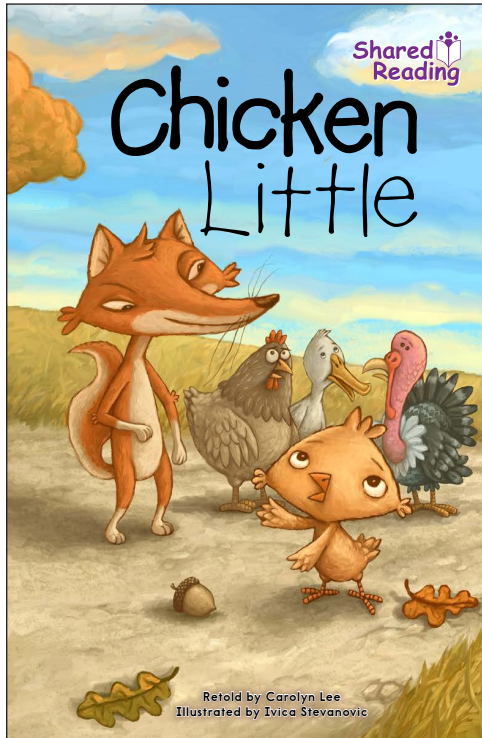
Module 4 Question

How can we be kind to others?

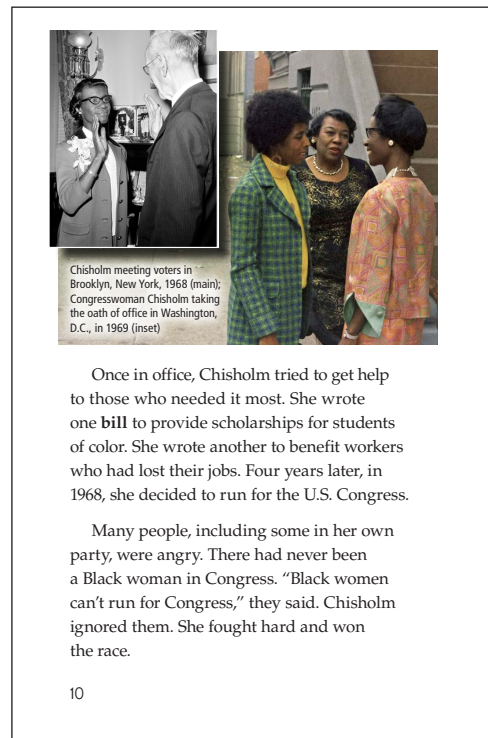
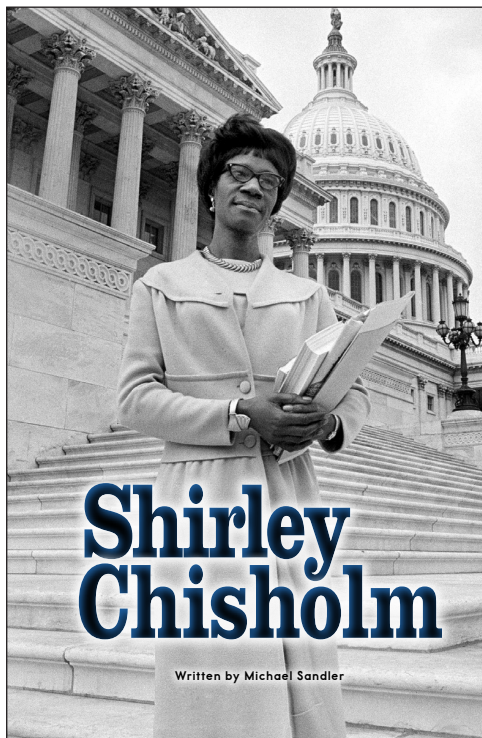


Each unit includes a unit question and four module questions to build and deepen knowledge in a variety of topics as students learn foundational skills.

Complex Texts



Grade 1 Shared Reader (fiction)



Grade 4 Grade-Level Reader (nonfiction)

BEST PRACTICE IN ASSESSMENT

Assessment Roles and Purposes

Assessments are designed to serve specific purposes, and it is important to understand that a test designed for one purpose is unlikely to be suitable for another. For example, research consistently shows that systematic assessment is integral for continuously evaluating student performance and ensuring that teachers have confidence in the instructional decisions they make to meet student needs (Fuchs & Fuchs, 1986; Black & William, 2006; Hattie, 2009). Such assessments are often informal, granular in nature, and tied to a specific instructional unit's learning objectives. They are not, however, appropriate as broad measures of progress toward achieving standards.

Assessment also serves as a tool for documenting growth and as an accountability measure. Increased use of assessment for accountability purposes resulted from the passing of Title I (Improving America's Schools Act of 1994), in which schools were required to use state-developed tests to document their students' performance according to designated state standards. While accountability measures facilitate comparison across schools or districts in order to shape policy decisions, they are so broad in scope that they are of little practical use in addressing the specific instructional needs of individual students.

The Foundations A–Z program recognizes this dichotomy and provides an assessment suite with components that serve both purposes: to allow for customizable instruction based on student needs and to facilitate comparisons of student progress toward achieving state standards over time and across classrooms, grade levels, and schools.

Proficient, Fluent Readers



Interim Assessments

Interim assessments offer periodic snapshots of student progress toward state or district benchmarks.



Unit Assessments

Unit assessments allow for a comprehensive overview of achievement toward unit instructional goals.



Teacher Checklist

Teacher observation checklists enable progress monitoring across the module and inform instruction.



Student Interactivities

Student interactivities provide daily deliberate practice and self-assessment of lesson objectives.

Assessment to Inform Instruction

Several types of assessments created to inform instruction are woven into the Foundations A–Z scope and sequence and are aligned to the learning objectives for each instructional lesson, module, and unit. They include the following:

- informal student self-assessment in the form of practice interactivities
- informal teacher observation checklists
- formal end-of-unit assessments

When assessment moves beyond success or failure, it becomes a powerful tool for student empowerment.

Vicki McCoy,
Northwest Evaluation Association, 2020

Student Self-Assessment, Metacognition, and Motivation

Metacognition is awareness of one’s thoughts and actions and the outcomes associated with them. Such awareness allows learners to examine and refine their thought processes to improve outcomes and, ultimately, develop automaticity. It informs the appropriate application of skills and concepts learned.

One of the best ways to develop metacognition in students is by guiding students to self-assess in a low-stakes/high-trust environment. Rather than using mistakes to indicate success or failure, errors are treated as “opportunities to learn,” fostering a culture of risk-taking and improvement through ongoing self-evaluation.



Student self-assessment in Foundations A–Z occurs as learners engage with game-like practice interactivities completed independently after direct instruction. The interactivities are brief, entertaining, and offer immediate feedback that allows students to reflect on and correct their misconceptions and misunderstandings as they revisit a task and make a second attempt to perform that task correctly. With teacher guidance, the process provides access to avenues of deeper learning and profound cognitive growth and development (Holl, n. d.).

Providing continual, systematic opportunities for practice, followed by immediate feedback, supports students' ability to retain information long term and builds student motivation and desire to improve (Hattie, 2009; Hattie & Yates, 2013). The process cultivates a growth mindset and empowers students to be active learners.

Teacher Observation and Developing Expertise

Observation checklists are used for formative evaluation and are embedded in each lesson of the Foundations A–Z program to help teachers identify and address student missteps and misunderstandings early on. By focusing on leading indicators of progress as students are learning, rather than waiting for lagging indicators presented in end-of-unit tests, teachers can prevent the development of bad habits at the outset. Progress-monitoring assessments allow educators to check in on a student's understanding of instruction and provide the opportunity for educators to quickly adjust their instructional practice in an informed way (Guskey, 2003; Malcom, n. d.).

Using the checklists as formative assessments serves not only to help teachers diagnose and address student difficulties but also to improve their own metacognitive skills as educators. Paying deliberate attention to student behavior and adjusting instruction accordingly becomes second nature, developing instructional automaticity that alleviates the need for formal diagnostic testing. Teachers become more attuned to signs of trouble and more aware of which interventions are most effective in addressing them.

Formal Unit Assessment, Reporting, and Follow-Up

Data from both informal and formal assessments combine to present a comprehensive overview of student abilities. Utilizing different types of assessments yields richer student information, providing a balanced and comprehensive view of student learning (Snow et al., 1998; Pellegrino, 2006). Informal, ongoing assessments, such as checklists, yield immediate, actionable data on student performance. While valuable, such data do not negate the use of formal assessment reports to provide a snapshot of student abilities and drive decisions about instructional next steps that best serve all students in a class.

Formal assessments such as program unit tests are typically comprehensive and assess the specific learning goals or objectives taught in that instructional block. Ideally, results are presented in reports that link appropriate program resources for reteaching or enriching key skills and concepts as needed. Reports can help to facilitate small-group instruction by indicating subgroups of students all demonstrating similar strengths and weaknesses. Formal assessments can also serve as a check on which instructional shifts made during informal evaluation were most effective in correcting student misperceptions.

Assessment as a Growth and Accountability Measure

System-wide assessment, be it at the grade, school, or district level, can serve several purposes. When test content is aligned to institutional or state standards, test results can offer a snapshot of how students are progressing toward a mandated goal or grade-level benchmark. Similarly, such tests can provide data on how effective an instructional program or teaching method is in moving students to achieve that goal. Growth or improvement can be noted when parallel tests are administered at regular intervals. Variations across subgroups of test-takers in meeting those standards can be noted and addressed.

Standards provide a vision for teaching and learning, but the vision cannot be realized unless the standards permeate the education system and guide curriculum, instruction, teacher preparation and professional development, and student assessment.

National Research Council, 2012

To accomplish these purposes, such assessments must meet certain criteria:

- The assessments must be valid. Validity refers to “. . . the degree to which evidence and theory support the interpretation of test scores for proposed uses of tests” (American Educational Research Association et al., 2014, 225). In its simplest form, validity answers the following question: Is the assessment measuring what it is intended to measure? (Downing, 2003; Kane, 2006; Kane, 2013; Messick, 1993; National Research Council, 2002, 2014). Establishing validity is a process and involves a number of types of evidence.
- The assessments must be reliable. One way to increase reliability across assessments is, as far as possible, to create forms that are parallel in content and, where appropriate, in difficulty. When care is taken to create parallel content and difficulty, measures of reliability reveal how consistent an assessment is—across forms and occasions—in gauging students’ ability and their achievement on predetermined skills, concepts, and standards (American Educational Research Association et al., 2014; Northwest Evaluation Association, 2020).
- Test results and reports must be transparent and comparable. Because it is impossible for a single test to cover all curriculum standards, results are reported using scoring categories that represent a sampling of items covering some of the standards within that category. What learning objectives and standards fall into each scoring category should be clearly indicated. In order to facilitate comparison and document growth, categories must be consistent across test forms and grade bands.

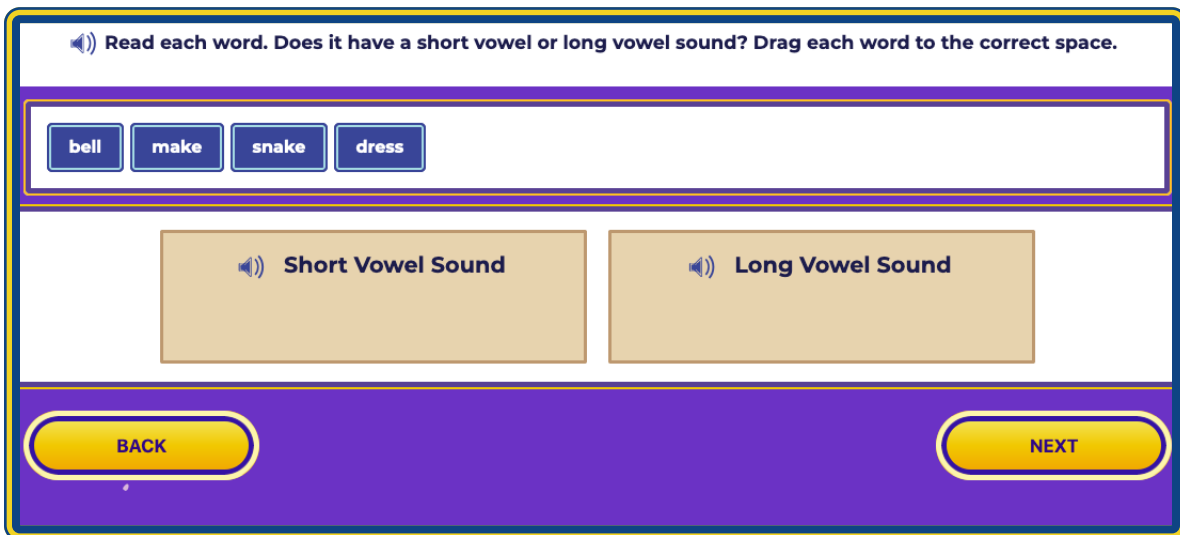
The Foundations A–Z program offers interim assessments as system-wide growth and accountability measures. Three test forms at each grade level are aligned to benchmark foundational reading curriculum standards as defined by the Common Core State Standards. These interim assessments were developed according to the criteria listed above and can be administered at the start, midpoint, and end of the academic year. Parallel forms with similar content distribution, item formats, and standard coverage and uniform score reports enable comparisons across groups of students to determine overall progress toward meeting system-wide benchmarks.

Design of the Foundations A–Z Assessment Suite

As a complement to the Foundations A–Z commitment to “rigorous, systematic, and explicit instruction that addresses the essential components of literacy” (NICHD, 2000), a comprehensive assessment system is included to assist educators in being reflective practitioners to adjust their instructional practice to meet their students’ specific needs (Spear-Swerling, 2019). The Foundations A–Z assessment suite features both formative and summative assessments designed to inform instruction and document growth toward meeting state benchmarks. Together, these instruments provide a comprehensive picture of students’ needs, strengths, and overall abilities.

Student Practice Interactivities: Formative Assessment

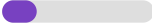



Every lesson includes two to three independent digital activities aligned to skills and concepts taught. Once a lesson is complete, the teacher can assign the lesson’s practice interactivities for students to demonstrate independently the skills learned during the lesson. As students complete the practice interactivities, they receive content-specific feedback (or reminders or prompts) that assists them with identifying why they are struggling with the given skill or concept and guides them to complete the task correctly. After an initial incorrect answer and its corresponding feedback, students are provided a second attempt at the item where they can revise their answer based on the feedback received.



Sample interactivity

Practice interactivities are a formative assessment that offer opportunities for students to participate in mindful and productive tasks that foster self-awareness and that challenge understanding. Offering immediate feedback and opportunities for correction ignites metacognitive processes that lead to lasting learning gains, creating self-directed, independent learners.

Teachers can monitor how well students meet these challenges by using the Assignment Progress feature. Both individual and group scores for assigned lesson interactivities can be tracked.

Date Assigned	Assignment	Students Assigned	Total Progress	Average Score
Feb 07, 2021	G3 U4 Assessment Grade 3 Lesson	26	20% 	
Feb 06, 2021	G3 U4 M5 L4 Grade 3 Lesson	26	82% 	48%
Feb 05, 2021	G3 U4 M5 L3 Grade 3 Lesson	26	100% 	72%
Feb 04, 2021	G3 U4 M5 L2 Grade 3 Lesson	26	94% 	89%



Teacher Observation Checklist: Formative Assessment

Embedded in each lesson is an observation checklist designed to be used as an informal, formative measure of how students are learning “in the moment.” Teachers complete the checklist as they monitor student performance during discussion and whole group learning activities, as well as noting how students navigate the practice interactivities. Checklists are available as fillable PDFs; they can also be printed and completed manually.

Numbered learning objectives for each lesson in a module are listed above a class roster, which allows teachers to quickly note areas of need and strength for each student. Teachers can then adjust instruction by organizing students demonstrating similar needs for small-group instruction, pairing weak with strong students in collaborative learning activities, or directing proficient students toward tasks requiring them to stretch their abilities a bit.

As an added benefit, repeated use of the checklist hones teachers’ abilities to recognize early indications of learning gaps and respond appropriately and quickly.

Foundations A-Z
Observation Checklist

Date Range: _____ Grade 1 • Unit 2 • Module 3

Lesson 1	Lesson 2	Lesson 3	Lesson 4
CFU 1 Phonics: I can read words with the phonogram <i>-ack</i> . CFU 2 Print Concepts: I can explain that a sentence starts with a capital letter. CFU 3 Phonics: I can read words with initial <i>L</i> -blends. CFU 4 Phonics: I can count syllables by counting vowel sounds. CFU 5 Phonics: I can recognize that a closed syllable ends with a consonant. CFU 6 High-Frequency Words: I can read and write the word <i>ouch</i> . CFU 7 Fluency: I can recognize and read words with initial <i>L</i> -blends. CFU 8 Language Connection: I can write complete sentences.	CFU 1 Phonics: I can read words with the phonogram <i>-ack</i> . CFU 2 Print Concepts: I can explain that a sentence starts with a capital letter. CFU 3 Phonics: I can, with prompting and support, listen to, read, and understand first-grade texts. CFU 4 Phonological Awareness: I can identify the sound that has changed from one word to the next. CFU 5 Phonics: I can read words with final <i>L</i> -blends. CFU 6 Phonics: I can count syllables by counting vowel sounds. CFU 7 Phonics: I can recognize that a closed syllable ends with a consonant. CFU 8 Fluency: I can recognize and read words, phrases, and sentences with final <i>L</i> -blends. CFU 9 Language Connection: I can speak in complete sentences.	CFU 1 Phonics: I can read words with the phonogram <i>-ack</i> . CFU 2 Phonological Awareness: I can identify the sound that has changed from one word to the next. CFU 3 Phonics: I can read words with <i>L</i> -blends. CFU 4 Phonics: I can count syllables by counting vowel sounds. CFU 5 Phonics: I can recognize that a closed syllable ends in a consonant. CFU 6 High-Frequency Words: I can read and write the words <i>ouch</i> , <i>spin</i> , <i>dash</i> , and <i>own</i> . CFU 7 Fluency: I can recognize and read words, phrases, and sentences with <i>L</i> -blends in connected text. CFU 8 Fluency: I can read and correct an error while reading and reread to check for understanding. CFU 9 Phonics: I can spell words with initial and final <i>L</i> -blends. CFU 10 Handwriting: I can form upper- and lowercase letters. CFU 11 Language Connection: I can write complete sentences.	CFU 1 Phonics: I can read words with the phonogram <i>-ack</i> . CFU 2 Print Concepts: I can explain that a sentence starts with a capital letter. CFU 3 Phonological Awareness: I can identify the sound that has changed from one word to the next. CFU 4 Phonics: I can read words with <i>L</i> -blends. CFU 5 Phonics: I can count syllables by counting vowel sounds. CFU 6 Phonics: I can recognize that a closed syllable ends with a consonant. CFU 7 Spelling: I can spell words using information I learned. CFU 8 Handwriting: I can form upper- and lowercase letters. CFU 9 Fluency: I can recognize and read words with <i>L</i> -blends in connected text. CFU 10 Language Connection: I can speak in complete sentences.

Name	Lesson 1					Lesson 2					Lesson 3					Lesson 4				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

Key: + exceeds = m

© Learning A–Z. All rights reserved.

Lesson 4

CFU 1 Phonics: I can read words with the phonogram *-ack*.

CFU 2 Print Concepts: I can explain that a sentence starts with a capital letter.

CFU 3 Phonological Awareness: I can identify the sound that has changed from one word to the next.

CFU 4 Phonics: I can read words with *L*-blends.

CFU 5 Phonics: I can count syllables by counting vowel sounds.

CFU 6 Phonics: I can recognize that a closed syllable ends with a consonant.

CFU 7 Spelling: I can spell words using information I learned.

CFU 8 Handwriting: I can form upper- and lowercase letters.

CFU 9 Fluency: I can recognize and read words with *L*-blends in connected text.

CFU 10 Language Connection: I can speak in complete sentences.

Sample observation checklist

Formal Unit Tests: Formative and Summative Assessment

At all grade levels in the Foundations A–Z program, each of eight units concludes with a formal unit assessment. Unit assessments consist of twenty-two items for grades K and 1, and thirty items for grades 2 through 5. The assessments are summative in that test items correspond to the skills and concepts taught across all four modules of that unit. Items are grouped into broader categories or domains, such as phonics or high-frequency words, as per the test blueprint for that grade.

Because reporting categories are uniform across grade bands (K and 1 and 2–5), they allow teachers to note which areas students most struggle with or excel in. In this way, the unit tests also function as formative assessments that inform follow-up instruction using recommended reteach or enrich activities linked to key concepts and skills. End-of-unit tests can be completed on the Foundations A–Z digital platform or using a printed paper-and-pencil version. To give students the best chance for success, unit assessments in both formats are untimed and can be administered in a single session or in multiple test sessions. The program’s test administration manual provides detailed information on administering both versions of the test as well as how to interpret scoring.

GK Foundations A–Z Unit Assessment Blueprint	
Total Test Length: Items	22
Reporting Category 1: Foundational Skills	14
Print Concepts	2
Phonological Awareness	6
Phonics	6
Fluency	0
Reporting Category 2: Language Skills	8
High-Frequency Words	6
Grammar and Mechanics	2

Foundations A–Z grade K unit test blueprint

Interim Tests: Summative Assessment

Interim assessments are administered three times a year: at the beginning of the program, upon completion of Unit 4 (the program midpoint), and after Unit 8 is completed at the end of the year. Blueprints for the interim assessments are similar to unit assessment blueprints insofar as they include test items aligned to grade-level skills and concepts that are grouped by reporting categories. However, interim test forms are significantly longer due to their scope and include fifty test items in all grades.

G3 NGRF Interim Assessment Blueprint		G4 NGRF Interim Assessment Blueprint	
Total Test Length: Items	50	Total Test Length: Items	50
Reporting Category 1: Foundational Skills	23	Reporting Category 1: Foundational Skills	24
Phonics	19	Phonics	20
Fluency	4	Fluency	4
Reporting Category 2: Language Skills	27	Reporting Category 2: Language Skills	26
High-Frequency Words	7	High-Frequency Words	6
Vocabulary / Grammar and Mechanics	20	Vocabulary / Grammar and Mechanics	20

Foundations A–Z interim assessment blueprints for grades 3 and 4





Since interim assessments are intended for use as summative growth and accountability measures, they were designed with that function in mind:

- Skills and concepts tested are mapped onto grade-level state standards for foundational skills as well as program learning objectives (LOs).
- Scores are reported by grade-level state standards as well as by program LOs.
- Test forms within a grade are parallel in content (testing the same standards across all forms) but scaled in difficulty from beginning to end of year.

The beginning-of-year assessment can be used as a baseline or starting point for documenting growth toward state benchmarks. If desired, it can also be used for diagnostic purposes as it informs teachers of what students know or do not know going into the new school year. This information helps teachers determine individual student knowledge of foundational skills in order to build on their students' strengths as well as address areas of need. The program's middle and end-of-year assessments track and identify what students have learned and determine if they are on track for meeting grade-level standards.

Score Reports

Automated individual and group score reports are generated for student self-assessments (practice interactivities), unit tests, and interim assessments. All reports provide criterion-referenced data on student performance using program learning objectives or grade-level foundational skills standards. These data show competency levels for each of the tested skills.

Date Assigned	Assignment	Students Assigned	Total Progress	Average Score
Feb 07, 2021	G3 U4 Assessment Grade 3 Lesson	26	20% 	48%
Feb 06, 2021	G3 U4 M5 L4 Grade 3 Lesson	26	82% 	72%
Feb 05, 2021	G3 U4 M5 L3 Grade 3 Lesson	26	100% 	72%
Feb 04, 2021	G3 U4 M5 L2 Grade 3 Lesson	26	94% 	89%

Sample group report showing scoring categories

Cut points for each competency level were determined based on research on the effectiveness of mastery learning and holding students to specific criteria in elementary grades. Applying a mastery level of at least 80 percent accuracy resulted in high levels of student achievement (Anderson et al., 1992; Block & Burns, 1976; Kulik et al., 1990; Mevarech, 1985).

Three color-coded scoring criterion categories highlight students' progress for each digital assessment within the Foundations A–Z program.

- Red: 0%–69% (Reteach opportunity)
- Yellow: 70%–79% (Reinforce opportunity)
- Green: 80%–100% (Enrich opportunity)

These resources are populated based on the specific skills, objectives, and standards that each question in the assessment is aligned with. This level of alignment ensures that students receive resources specifically geared toward assisting them in making progress with the concepts and skills causing them the most difficulty (Schacheter & Piasta, 2021).

Foundations A–Z assessments are linked to instructional resources to further strengthen their foundational reading skills. Based on students' performance, educators receive tailored instructional recommendations to reteach important foundational skills, reinforce student understanding, or enrich their learning by providing appropriate challenges to expand their skills. Those resources are described in detail in Learning Design Principles, and Building Reading Skills sections.

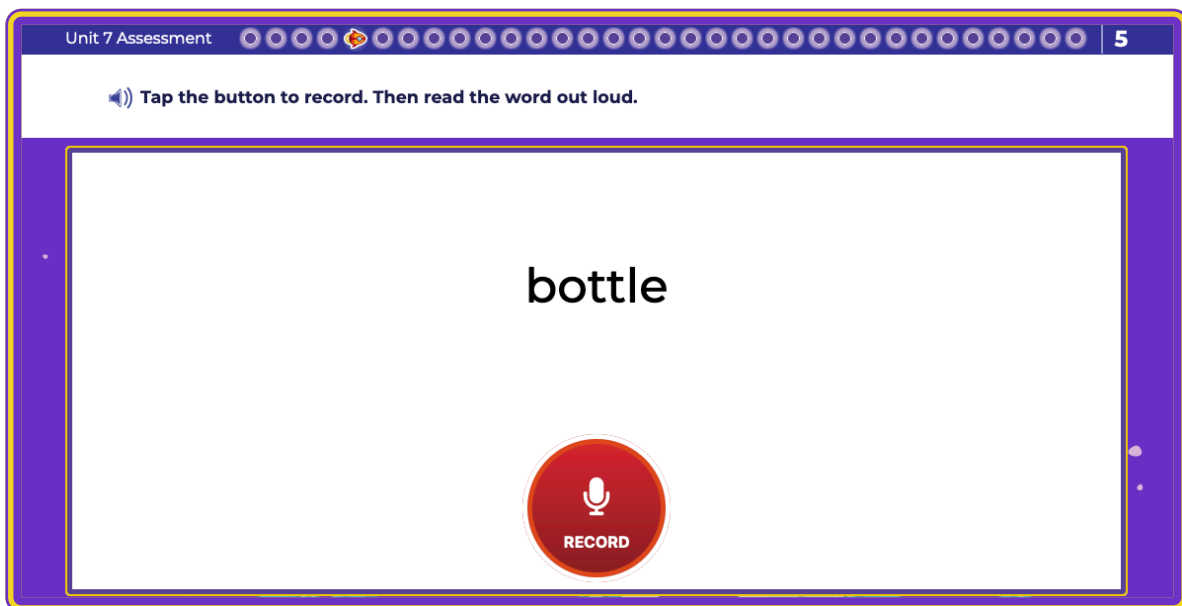
Developmentally Appropriate Design and Format

Assessing young children poses particular challenges, especially when done in large and small groups. Primary-grade students (grades K–2) have limited or no experience with test item formats like those typically found on large-scale, high-stakes assessments or even in many traditional basal reading programs. Special consideration must be given to the developmental appropriateness of tasks students are asked to complete and whether novice test-takers can easily navigate those tasks. Item formats or test construction that impedes students' ability to respond compromises the validity and reliability of test data.

The National Association for the Education of Young Children (NAEYC, 2020) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE, 2013) provide clear recommendations for creating assessments for children eight years old and younger. Test developers should do the following:

- use assessment methods that are developmentally appropriate
- ensure that what is assessed is developmentally and educationally significant
- make the primary focus children's gains or progress as documented in observations, samples of classroom work, and other assessments over the duration of the program

The design and digital format of Foundations A–Z assessment takes all of these concerns into consideration.¹ The program offers a variety of digital assessment resources in order to provide a complete profile of student ability. In addition, the digital item formats available in Foundations A–Z enable the assessment of foundational skills and competencies that are less amenable to traditional assessment methods, such as phonological awareness or fluency/prosody. Voice-to-text technology, along with touch-screen responsiveness, makes it easier for students to complete items independently (Miller, 2019). Finally, the digital format enables immediate feedback to both teachers and students, a keystone of formative assessment that drives instruction and promotes learning (United States Department of Education, 2017). A compendium of assessment items used in the Foundations A–Z program can be found in the Assessment Administration Guide.



¹ Foundations A–Z assessments are also available in paper-and-pencil format for teachers who choose to administer the tests individually.

So . . . Why Foundational Skills?

The answer is simple and straightforward: Reading with understanding is at the heart of all learning in school, but students must first be able to “crack the code.” The Foundations A–Z program teaches word recognition and language skills students need to decipher words and glean their meaning. A comprehensive scope and sequence, research-based systematic instruction, and a robust assessment suite all combine to support the development of fundamental reading skills students will call on repeatedly as they progress through school. And as their proficiency in these basic skills grows, so too will students’ fluency and confidence, helping them become the drivers of their own learning in the classroom and beyond.

Acknowledgements

Many researchers supported the development of the Foundations A–Z program. We thank them all for their tenacious and thorough efforts to ensure the program’s accuracy. It is because of their invaluable work that Foundations A–Z exists to help all students become successful readers and writers.

- Dr. Christina M. Cassano, Salem State University
- Dr. Susan Dougherty, Rider University
- Dr. Marcia Kosanovich, MK Educational Research & Practice, LLC
- Dr. Julia B. Lindsey
- Dr. Robert Millard
- Dr. Kathleen Paciga, Columbia College Chicago
- Dr. Timothy Rasinski, Kent State University

Special thanks to the following educators for their reviews and feedback on the Foundations A–Z program.

- Sam Johnson, Tangipahoa Parish School System
- Ryan Ung, Long Beach Unified School District



References

- Achieve. (2007). *Aligned expectations: A closer look at college admissions and placement tests*. <https://www.achieve.org/publications/aligned-expectations-closer-look-college-admissions-and-placement-tests>
- Adams, M. J. (1990). *Beginning to Read: Thinking and Learning About Print*. MIT Press. <https://doi.org/10.2307/415121>
- Allington, R. L., & Gabriel, R. (2012). Every child, every day. *Educational Leadership*, 69(6), 11–15.
- Alshalaan, K. (2020). A comparison between English and Arabic sound systems regarding places of articulation. *Open Access Library Journal*, 7, Article e5679. <https://doi.org/10.4236/oalib.1105679>
- American Educational Research Association, & American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for Educational and Psychological Testing*. <https://doi.org/10.1037/e577932014-003>
- Anderson, S. A., Barrett, C., & Huston, M. (1992). *A mastery learning experiment* (ED348668). ERIC. <https://files.eric.ed.gov/fulltext/ED348668.pdf>
- Ankrum, J. W., & Bean, R. M. (2008). Differentiated reading instruction: what and how. *Reading Horizons*, 48(2), 133–146.
- Armbruster, B., Lehr, F., & Osborn, J. (2001). *Put Reading First: The Research Building Blocks for Teaching Children to Read* (1st ed.). Ed Pubs.
- Baker, S. K., Santiago, R. T., Masser, J., Nelson, N. J., & Turtura, J. (2018). *The Alphabetic Principle: From Phonological Awareness to Reading Words*. U.S. Department of Education, Office of Elementary and Secondary Education, Office of Special Education Programs, National Center on Improving Literacy. <http://improvingliteracy.org>
- Ball, E., & Blackman, B. (1991). Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? *Reading Research Quarterly*, 26(1), 49–66. <https://doi.org/10.1598/rrq.26.1.3>
- Bear, D., & Templeton, S. (1998). Explorations in development spelling: Foundations for learning and teaching phonics, spelling, and vocabulary, *The Reading Teacher*, 52(3), 222–242.
- Beck, I. L., McKeown, M., & Kucan, L. (2002). Choosing Words to Teach. In *Bringing Words to Life: Robust Vocabulary Instruction* (1st ed., pp. 15–30). Guilford Press.
- Berg, L. (2017). Comparing research on how the brain learns to read and sight word instruction [Master's thesis, The Colorado College] Colorado College Archive.
- Black, P., & William, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74. <https://doi.org/10.1080/0969595980050102>
- Blevins, W. (2017). *A Fresh Look at Phonics: Common Causes of Failure and 7 Ingredients for Success*. Corwin
- Block, J., & Burns, R. (1976). Mastery learning. In Lee S. Shulman (Ed.), *Review of Research in Education* (pp. 3–49). Peacock Publishers.
- Bowers P., Kirby, J., & Deacon, S. (2010). The effects of morphological instruction on literacy skills: A systematic review of the literature. *Review of Educational Research*, 80(2), 144–179. <https://doi.org/10.3102/0034654309359353>
- Boyd, F., Causey, L., & Galda, L. (2015). Culturally diverse literature: Enriching variety in an era of Common Core State Standards. *The Reading Teacher*, 68(5), 378–387. <https://doi:10.1002/trtr.1326>
- Brady, S. (2020). A 2020 perspective on research findings on alphabetic (phoneme awareness and phonics): Implications for instruction. *The Reading League Journal*, 1(3), 20–28.
- Brown, L. T., Mohr, K. A. J., Wilcox, B. R., & Barrett, T. S. (2017). The effects of dyad reading and text difficulty on third-graders' reading achievement. *The Journal of Educational Research*, 111(5), 541–553. <https://doi.org/10.1080/00220671.2017.1310711>
- Brown, M. C., Sibley, D. E., Washington, J. A., Rogers, T. T., Edwards, J. R., MacDonald, M. C., & Seidenberg, M. S. (2015). Impact of dialect use on a basic component of learning to read. *Frontiers in Psychology*, 6(196). <https://doi.org/10.3389/fpsyg.2015.00196>
- Butler, S., Urrutia, K., Buenger, A., Gonzalez, N., Hunt, M., & Eisenhart, C. (2010). *A Review of the Current Research on Vocabulary Instruction*. National Reading Technical Assistance Center, RMC Research Corporation. <https://www2.ed.gov/programs/readingfirst/support/rmcfinal1.pdf>

- Campitelli, G., & Gobet., F. (2011). Deliberate practice: Necessary but not sufficient. *Current Directions in Psychological Science*, 20(5), 280–285.
<https://doi.org/10.1177/0963721411421922>
- Carnine, D. W., Silbert, J., Kame'enui, E. J., Tarver, S. G., & Jungjohann, K. (2006). *Teaching Struggling and At-Risk Readers*. Pearson.
- Castiglioni-Spalten, M., & Ehri, L. C. (2003). Phonemic awareness instruction: Contribution of articulatory segmentation to novice beginners' reading and spelling. *Scientific Studies of Reading*, 7(1), 25. https://doi.org/10.1207/s1532799xssr0701_03
- Catts, H. W., Fey, M. E., Zhang, X., & Tomblin, J. B. (1999). Language basis of reading and reading disabilities: Evidence from a longitudinal investigation. *Scientific Studies of Reading*, 3(4), 331–361. https://doi.org/10.1207/s1532799xssr0304_2
- Cervetti, G. N., & Hiebert, E. H. (2015). The sixth pillar of reading instruction. *Reading Teacher*, 68(7), 548–551. <https://doi.org/10.1002/trtr.1343>
- Cheatham, J. P., & Allor, J. H. (2012). The influence of decodability in early reading text on reading achievement: A review of the evidence. *Reading and Writing: An Interdisciplinary Journal*, 25(9), 2223–2246. <https://doi.org/10.1007/s11145-011-9355-2>
- Clark, C. (2007). *Why It Is Important to Involve Parents in Their Children's Literacy Development: A Brief Summary*. United Kingdom: National Literacy Trust. (ED496346). ERIC. <https://files.eric.ed.gov/fulltext/ED496346.pdf>
- Clay, M. M. (1979). *What Did I Write? Beginning Writing Behaviour*. Heinemann Educational Books, Inc.
- Collaborative for Academic, Social, and Emotional Learning. (n. d.) *Fundamentals of SEL*. Retrieved April 15, 2022, from <https://casel.org/fundamentals-of-sel/>
- Colorín colorado. (2007). Capitalizing on similarities and differences between Spanish and English. <https://www.colorincolorado.org/article/capitalizing-similarities-and-differences-between-spanish-and-english>
- Connor, C. M., Dombek, J., Crowe, E. C., Spencer, M., Tighe, E. L., Coffinger, S., Zargar, E., Wood, T., & Petscher, Y. (2017). Acquiring science and social studies knowledge in kindergarten through fourth grade: Conceptualization, design, implementation, and efficacy testing of content-area literacy instruction (CALI). *Journal of Educational Psychology*, 109(3), 301–320. <https://doi.org/10.1037/edu0000128>
- Crawford, E. C., & Torgesen, J. K. (2006). *Teaching all children to read: Practices from Reading First schools with strong intervention outcomes*. Just Read, Florida. (ED498784). ERIC. <https://files.eric.ed.gov/fulltext/ED498784.pdf>
- Cromley, J.G., & Azevedo, R. (2007). Testing and refining the direct and inferential mediation model of reading comprehension. *Journal of Educational Psychology*, 99(2), 311–325. <https://doi.org/10.1037/0022-0663.99.2.311>
- Cunningham, A. E., & Stanovich, K. E. (1990). Assessing print exposure and orthographic processing skill in children: A quick measure of reading experience. *Journal of Educational Psychology*, 82(4), 733. <https://doi.org/10.1037/0022-0663.82.4.733>
- Dale, E. (1975). *The Word Game: Improving Communications*. Phi Delta Kappa Educational Foundation.
- Department of Education and Communities, State of New South Wales. (2015). *Strong start, great teachers*. <https://education.nsw.gov.au/teaching-and-learning/professional-learning/teacher-quality-and-accreditation/strong-start-great-teachers>
- Dolch, E. W. (1948). *Problems in Reading*. Garrard Press.
- Dowhower, S. L. (1991). Speaking of prosody: Fluency's unattended bedfellow. *Theory Into Practice*, 30(3), 165–175. <https://doi.org/10.1080/00405849109543497>
- Downing, S. M. (2003). Validity: On the meaningful interpretation of assessment data. *Medical Education*, 37(9), 830–837.
<https://doi.org/10.1046/j.1365-2923.2003.01594.x>
- Downing, S. M. (2004). Reliability: On the reproducibility of assessment data. *Medical Education*, 38(9): 1006–1012. <https://doi.org/10.1111/j.1365-2929.2004.01932.x>
- Driver, R., Newton, P., & Osborne, J. (2000). Establishing the norms of scientific argumentation in classrooms. *Science Education*, 84(3), 287–312.
[https://doi.org/10.1002/\(sici\)1098-237x\(200005\)84:3%3C287::aid-sce1%3E3.0.co;2-a](https://doi.org/10.1002/(sici)1098-237x(200005)84:3%3C287::aid-sce1%3E3.0.co;2-a)
- Duke, N. K., & Cartwright, K. B. (2021). The science of reading progresses: Communicating advances beyond the simple view of reading. *Reading Research Quarterly*, 56(S1), 25–44. <https://doi.org/10.1002/rrq.411>

- Duke, N. K., Halvorsen, A. L., Strachan, S. L., Kim, J., Konstantopoulos, S. (2021). Putting PjBL to the test: The impact of project-based learning on second graders' social studies and literacy learning and motivation in low-SES school settings. *American Educational Research Journal*, 58(1), 160–200. <https://doi.org/10.3102/0002831220929638>
- Duke, N. K., & Martin, N. M. (2008). Comprehension instruction in action: The elementary classroom. In C. C. Block & S. R. Parris (Eds.), *Comprehension Instruction: Research-Based Best Practices* (2nd ed., pp. 241–257). Guilford Press.
- Duke, N. K., & Mesmer, H. A. E. (2019). Phonics faux pas: Avoiding instructional missteps in teaching letter-sound relationships. *American Educator* 42(4): 12–16. 42(4), 12-16. (EJ1200223). ERIC. <https://files.eric.ed.gov/fulltext/EJ1200223.pdf>
- Duke, N. K., Pressley, M., & Hilden, K. (2005). Difficulties with reading comprehension. In C. A. Stone, E. R. Silliman, B. J. Ehren, & K. Apel (Eds.), *Handbook of Language and Literacy: Development and Disorders* (1st ed., pp. 501–520). Guilford Press.
- Duke, N., Norman, R., Roberts, K., Martin, N., Knight, J., Morsink, P., & Calkins, S. (2013). Beyond concepts of print: Development of concepts of graphics in text, PreK to grade 3. *Research in the Teaching of English*, 48(2), 175–203.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405–432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>
- Ehri, L. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*, 55(S1), S45–S60. <https://doi.org/10.1002/rrq.334>
- Ehri, L. C. (1995). Phases of development in learning to read words by sight. *Journal of Research in Reading*, 18(2), 116–125. <https://doi.org/10.1111/j.1467-9817.1995.tb00077.x>
- Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20(3), 19–36. <https://doi.org/10.1097/00011363-200020030-00005>
- Ehri, L. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading*, 9(2), 167–188. https://doi.org/10.1207/s1532799xssr0902_4
- Ehri, L. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5–21. <https://doi.org/10.1080/10888438.2013.819356>
- Ehri, L. C., & Roberts, T. (2007). The roots of learning to read and write: Acquisition of letters and phonemic awareness. In D. K. Dickinson & S. B. Neuman (Eds.) *Handbook of Early Literacy Research Vol. 2*. (pp. 113-131). Guilford Press.
- Englund M. M., Luckner, A. E., Whaley, G. J., & Egeland, B. (2004). Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectation, and quality of assistance. *Journal of Educational Psychology*, 96(4), 723–730. <https://doi.org/10.1037/0022-0663.96.4.723>
- Fien, H., Smith, J. L. M., Smolkowski, K., Baker, S. K., Nelson, N. J., & Chaparro, E. (2015). An examination of the efficacy of a multitiered intervention on early reading outcomes for first grade students at risk for reading difficulties. *Journal of Learning Disabilities*, 48(6), 602–621. <https://doi.org/10.1177/0022219414521664>
- Foorman, B. R. (1994). The relevance of a connectionist model of reading for “The great debate.” *Educational Psychology Review*, 6(1), 25–47. <https://doi.org/10.1007/bf02209023>
- 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(1), 37–55. <https://doi.org/10.1037/0022-0663.90.1.37>
- Foorman, B., Coyne, M., Denton, C. A., Dimino, J., Hayes, L., Justice, L., Lewis, W., & Wagner, R. (2016). *Educator's practice guide: Foundational skills to support reading for understanding in kindergarten through 3rd grade*. (NCEE 2016-4008). U.S. Department of Education, What Works Clearinghouse. https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/wwc_foundationalreading_040717.pdf
- Fry, E. (2000). *1000 Instant Words: The Most Common Words for Teaching Reading, Writing, and Spelling*. Teacher Created Resources.

- Fry, E. B., Kress, J. E., & Fountoukidis, D. L. (2000). *The Reading Teacher's Book of Lists* (4th ed.). Jossey-Bass.
- Fuchs, L.S., & Fuchs, D. (1986). Effects of systematic formative evaluation: A meta-analysis. *Exceptional Children*, 53(3), 199–208.
<https://doi.org/10.1177/001440298605300301>
- Gay, G. (2018). *Culturally Responsive Teaching: Theory, Research, and Practice* (3rd ed.). Teachers College Press.
- Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research*, 71(2), 279–320. <https://doi.org/10.3102/00346543071002279>
- Gonzalez-Frey, S. M. (2020). *Teaching Children to Decode Words: Connected Versus Segmented Phonation*. [Doctoral thesis, City University of New York] CUNY Academic Works. https://academicworks.cuny.edu/gc_etds/3860
- Gonzalez-Frey, S. M., & Ehri, L. C. (2020). Connected phonation is more effective than segmented phonation for teaching beginning readers to decode unfamiliar words. *Scientific Studies of Reading*, 25(3), 272–285. <https://doi.org/10.1080/10888438.2020.1776290>
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6-10.
<https://doi.org/10.1177/074193258600700104>
- Graham, S. (2009-2010). Want to improve children's writing? Don't neglect their handwriting. *American Educator*. <https://www.aft.org/sites/default/files/graham.pdf>
- Graham, S., & Harris, K. (2005). *Writing Better: Effective Strategies for Teaching Students with Learning Difficulties*. Paul H. Brookes Publishing Co.
- Graham, S., & Hebert, M. A. (2010). *Writing to Read: Evidence for How Writing Can Improve Reading*. Carnegie Corporation Time to Act Report. Alliance for Excellent Education. <https://www.carnegie.org/publications/writing-to-read-evidence-for-how-writing-can-improve-reading/>
- Groen, M. A., Veenendaal, N. J., & Verhoeven, L. (2019). The role of prosody in reading comprehension: Evidence from poor comprehenders. *Journal of Research in Reading*, 42(1), 37–57. <https://doi.org/10.1111/1467-9817.12133>
- Gross, J., Millett, A. L., Bartek, B., Bredell, K. H., & Winegard, B. (2013). Evidence for prosody in silent reading. *Reading Research Quarterly*, 49(2), 189–208.
<https://doi.org/10.1002/rrq.67>
- Guskey, T. R. (2003). How classroom assessments improve learning. *Educational Leadership*, 60(5), 6–11.
- Guthrie, J. T., & Humenick, N. M. (2004). Motivating students to read: Evidence for classroom practices that increase reading motivation and achievement. In P. McCardle & V. Chhabra (Eds.) *The Voice of Evidence in Reading Research* (pp. 329–354). Paul H. Brookes Publishing Co.
- Guthrie, J. T., Hoa, L. W., Wigfield, A., Tonks, S. M., & Perensevich, K. C. (2006). From spark to fire: Can situational reading interest lead to long-term reading motivation? *Reading Research and Instruction*, 45(2), 91–117. <https://doi.org/10.1080/19388070609558444>
- Hammond, Z. (2014). *Culturally Responsive Teaching and the Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students*. Corwin.
- Hanley, K. (2022, April 7). *What I learned from teaching English-language learners for 30 years*. Ed Week. <https://www.edweek.org/teaching-learning/opinion-what-i-learned-from-teaching-english-language-learners-for-30-years/2022/04>
- Hattie, J. (2009). Visibly learning from reports: The validity of score reports. Visible Learning Labs, University of Auckland, New Zealand.
<https://oerj.webspace.durham.ac.uk/wp-content/uploads/sites/249/2021/07/4.pdf>
- Hattie, J., & Yates, G. C. R. (2013). *Visible Learning and the Science of How We Learn* (1st ed.). Routledge. <https://doi.org/10.4324/9781315885025>
- Hendricks, A. E., & Adolf, S. M. (2020). Production of morphosyntax within and across different dialects of American English. *Journal of Speech, Language, and Hearing Research*, 63(7), 2322–2333. https://doi.org/10.1044/2020_jslhr-19-00244
- Henry, M. K. (1988). Beyond phonics: Integrated decoding and spelling instruction based on word origin and structure. *Annals of Dyslexia*, 38(1), 258–275.
<https://doi.org/10.1007/bf02648260>
- Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. The Annie E. Casey Foundation.
<https://assets.aecf.org/m/resourcedoc/AECF-DoubleJeopardy-2012-Full.pdf>

- Hill, J. D., & Miller, K. B. (2013). *Classroom Instruction that Works with English Language Learners* (2nd ed.). Mid-continent Research for Education and Learning.
- Hirsch, E. D. (2003). Reading comprehension requires knowledge—Of words and the world: Scientific insights into the fourth-grade slump and stagnant reading comprehension. *American Educator*, 27(1), 10–29. <https://tinyurl.com/3tkejs49>
- Holl, R. (n. d.) *The Importance of Feedback*. Learning A–Z. <https://www.learninga-z.com/site/resources/breakroom-blog/importance-of-feedback>
- Houdé, O., Rossi, S., Lubin, A., & Joliot, M. (2010). Mapping numerical processing, reading, and executive functions in the developing brain: An MRI meta-analysis of 52 studies including 842 children. *Developmental Science*, 13(6): 876–885. <https://doi.org/10.1111/j.1467-7687.2009.00938.x>
- Houck, B. D., & Ross, K. (2012). Dismantling the myth of learning to read and reading to learn. *ASCD Express*, 7(11). <https://www.ascd.org/el/articles/dismantling-the-myth-of-learning-to-read-and-reading-to-learn>
- Huttenlocher, J., Vasilyeva, M., Waterfall, H. R., Vevea, J. L., & Hedges, L. V. (2007). The varieties of speech to young children. *Developmental Psychology*, 43(5), 1062–1083. <https://doi.org/10.1037/0012-1649.43.5.1062>
- Institute for Multi-sensory Education. (2019, October 31). *Phonemic awareness vs. phonics*. <https://journal.imse.com/phonemic-awareness-vs-phonics/>
- International Literacy Association. (2018). *Expanding the canon: How diverse literature can transform literacy learning*. <https://tinyurl.com/2p8mdx88>
- International Literacy Association. (2018). *The Power and promise of read-alouds and independent reading*. <https://tinyurl.com/4tpehrp>
- International Literacy Association. (2019). *Meeting the challenges of early literacy phonics instruction*. <https://tinyurl.com/mu2bx3h4>
- International Literacy Association. (2019). *Phonological awareness in early childhood literacy development*. <https://tinyurl.com/3d7t3tju>
- International Literacy Association. (2019). *Teaching and assessing spelling*. <https://tinyurl.com/bdcs4ykd>
- Jackson, R., & Zmuda, A. (2014). 4 (secret) keys to student engagement. *Educational Leadership*, 72(1), 18–24. [https://www.ascd.org/el/articles/four-\(secret\)-keys-to-student-engagement](https://www.ascd.org/el/articles/four-(secret)-keys-to-student-engagement)
- Jeong, J., Gaffney, J. S., & Choi, J. O. (2010). Availability and use of informational texts in second-, third-, and fourth-grade classrooms. *Research in the Teaching of English*, 44(4), 435–456. <https://library.ncte.org/journals/rte/issues/v44-4>
- Johns, J. L., & Lenski, S. D. (2019). *Improving Reading: Interventions, Strategies, and Common Core Connections* (7th ed.). Kendall Hunt.
- Jones, C., Clark, S., & Reutzel, D. (2012). Enhancing alphabet knowledge instruction: Research implications and practical strategies for early childhood educators. *Early Childhood Education Journal* 41(2): 81–89. <https://doi.org/10.1007/s10643-012-0534-9>
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80(4): 437–447. <https://doi.org/10.1037/0022-0663.80.4.437>
- Juel, C. (2007). The impact of early school experiences on initial reading. In D.K. Dickinson & S. B. Neuman (Eds.) *Handbook of Early Literacy Research, Vol. 2* (pp. 410–426). Guilford Press.
- Juel, C., Griffith, P. L., & Gough, P. B. (1986). Acquisition of literacy: A longitudinal study of children in first and second grade. *Journal of Educational Psychology*, 78(4), 243–255. <https://doi.org/10.1037/0022-0663.78.4.243>
- Justice, L., Mashburn, A., & Petscher, Y. (2013). Very early language skills of fifth-grade poor comprehenders. *Journal of Research in Reading*, 36(2), 172–185. <https://doi.org/10.1111/j.1467-9817.2011.01498.x>
- Justice, L. M., McGinty, A. S., Cabell, S. Q., Kilday, C. R., Knighton, K., & Huffman, G. (2010). Language and literacy curriculum supplement for preschoolers who are academically at risk: A feasibility study. *Language, Speech, and Hearing Services in Schools*, 41(2), 161–178. [https://doi.org/10.1044/0161-1461\(2009/08-0058\)](https://doi.org/10.1044/0161-1461(2009/08-0058))
- Justice, L. M., Pence, K., Bowles, R. B., & Wiggins, A. (2006). An investigation of four hypotheses concerning the order by which four-year-old children learn the alphabet letters. *Early Childhood Research Quarterly*, 21(3), 374–389. <https://doi.org/10.1016/j.ecresq.2006.07.010>
- Justice, L. M., & Piasta, S. (2011). Developing children's print knowledge through adult-child storybook reading interactions: Print referencing as an instructional practice. In D. K. Dickinson & S. B. Neuman (Eds.), *Handbook of Early Literacy Research* (pp. 200–213). Guilford Press.

- Justice, L., & Sofka, A. (2010). *Engaging Children with Print: Building Early Literacy Skills through Quality Read-Alouds*. Guilford Press.
- Kane, M. T. (2006). Validation. In R. L. Brennan (Ed.), *Educational Measurement* (4th ed., pp. 17–64). Praeger.
- Kane, M. T. (2013). Validation as a pragmatic, science activity. *Journal of Educational Measurement*, *50*(1), 115–122. <https://doi.org/10.1111/jedm.12007>
- Kearns, D. M., Steacy, L. M., Compton, D. L., Gilbert, J. K., Goodwin, A. P., Cho, E., & Collins, A. A. (2016). Modeling polymorphemic word recognition: Exploring differences among children with early-emerging and late-emerging word reading difficulty. *Journal of Learning Disabilities*, *49*(4), 368–394. <https://doi.org/10.1177/0022219414554229>
- Kilpatrick, D. A. (2015). *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*. John Wiley & Sons.
- Kulik, C., Kulik, J., & Bangert-Drowns, R. (1990). Effectiveness of mastery learning programs: A meta-analysis. *Review of Educational Research*, *60*(2), 265–299. <https://doi.org/10.3102/00346543060002265>
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, *6*(2), 293–323. [https://doi.org/10.1016/0010-0285\(74\)90015-2](https://doi.org/10.1016/0010-0285(74)90015-2)
- Ladson-Billings, G. (1994). *The Dreamkeepers: Successful Teachers of African American Children*. Jossey-Bass Publishing Company.
- Lane, H. B., & Pullen, P. C. (2004). *A Sound Beginning: Phonological Awareness Assessment and Instruction*. Allyn & Bacon.
- Lervåg, A., Hulme, C., & Melby-Lervåg, M. (2018). Unpicking the developmental relationship between oral language skills and reading comprehension: It's simple, but complex. *Child Development*, *89*(5), 1821–1838. <https://doi.org/10.1111/cdev.12861>
- Lesaux, N. K., & Siegel, L. S. (2003). The development of reading in children who speak English as a second language. *Developmental Psychology*, *39*(6), 1005–1019. <https://doi.org/10.1037/0012-1649.39.6.1005>
- Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). *Reading on Grade Level in Third Grade: How Is It Related to High School Performance and College Enrollment?* Chapin Hall at the University of Chicago.
- Levy, B. A., Gong, Z., Hessels, S., Evans, M. A., & Jared, D. (2006). Understanding print: Early reading development and the contributions of home literacy experiences. *Journal of Experimental Child Psychology*, *93*(1), 63–73. <https://doi.org/10.1016/j.jecp.2005.07.003>
- Lieberman, I. Y., Shankweiler, D., & Liberman, A. M. (1989). *The alphabetic principle and learning to read*. National Institute of Child Health and Human Development. (ED427291). ERIC. <https://files.eric.ed.gov/fulltext/ED427291.pdf>
- Lindsey, J. B., Kuehl, R., & Mesmer, H. A. (2020). Phonics and phonemic awareness. In E. Ortlieb, S. Grote-Garcia, J. Cassidy, & E. Cheek (Eds.), *What's Hot in Literacy: Exemplar Models of Effective Practice* (pp. 159–180). Emerald Publishing Limited.
- Lonigan, C. J., Burgess, S. R., & Anthony, J. L. (2000). Development of emergent literacy and early reading skills in preschool children: Evidence from a latent-variable longitudinal study. *Developmental Psychology*, *36*(5), 596–613. <https://doi.org/10.1037/0012-1649.36.5.596>
- Lonigan, C. J., Schatschneider, C., & Westberg, L. (2008). *Identification of children's skills and abilities linked to later outcomes in reading, writing, and spelling*. In *Developing Early Literacy: Report of the National Early Literacy Panel* (pp. 55–106). <https://lincs.ed.gov/publications/pdf/NELPReport09.pdf>
- McCandliss, B., Beck, I. L., Sandak, R., & Perfetti, C. (2003). Focusing attention on decoding for children with poor reading skills: Design and preliminary tests of the word building intervention. *Scientific Studies of Reading*, *7*(1), 75–104. https://doi.org/10.1207/s1532799xssr0701_05
- McNaughton, S. (2014). Classroom instruction: The influences of Marie Clay. *The Reading Teacher*, *68*(2), 88–92. <https://doi.org/10.1002/trtr.1286>
- Malcom, U. (n. d.) Evidence-based assessment in the science of reading. Retrieved October 25, 2022, from <https://www.ldatschool.ca/evidence-based-assessment-reading/>
- Marzano, R. J. (2010). *Teaching Basic and Advanced Vocabulary: A Framework for Direct Instruction*. Heinle
- Masek, L. R., Scott, M. E., Dore, R., Luo, R., Hirsh-Pasek, K., & Golinkoff, R. M. (2018). Now you're talking. In C.M. Cassano & S.M. Dougherty (Eds.), *Pivotal Research in Early Literacy: Foundational Studies and Current Practices* (pp. 9–28). Guilford Press.

- Mason, J. M. (1980). When do children begin to read: An exploration of four-year-old children's letter and word reading competencies. *Reading Research Quarterly*, 15(2) 203–227. <https://doi.org/10.2307/747325>
- Massey, D. D., Vaughn, M., & Hiebert, E. (2021). Fostering hope with children's literature. *The Reading Teacher*, 75(5), 575–582. <https://doi.org/10.1002/trtr.2069>
- Mesmer, H. A. E. (2000). Decodable text: A review of what we know. *Literacy Research and Instruction*, 40(2): 121–141. <https://doi.org/10.1080/19388070109558338>
- Mesmer, H. A. E. (2005). Text decodability and the first-grade reader. *Reading & Writing Quarterly*, 21(1), 61–86. <https://doi.org/10.1080/10573560590523667>
- Mesmer, H. A. E., & Griffith, P. L. (2005). Everybody's selling it—But just what is explicit, systematic phonics instruction? *The Reading Teacher*, 59(4), 366–376. <https://doi.org/10.1598/rt.59.4.6>
- Messick, S. (1993). *Foundations of Validity: Meaning and Consequences in Psychological Assessment*. ETS Research Report Series (pp. i–18). <https://doi.org/10.1002/j.2333-8504.1993.tb01562.x>
- Mevarech, Z. R. (1985). The effects of cooperative mastery learning strategies on mathematical achievement. *Journal of Educational Research*, 78(6), 372–377. <https://doi.org/10.1080/00220671.1985.10885633>
- Miller, M. (2019, March 19). *7 advantages digital assessments have over paper tests and exams*. Emerging EdTech. <https://www.emergingedtech.com/2019/03/7-advantages-digital-assessments-have-over-paper-tests-exams/>
- Moats, L. (2007). *Whole-language high jinks: How to tell when “scientifically-based reading instruction” isn’t*. Thomas B. Fordham Institute. <https://www.thereadingleague.org/wp-content/uploads/2018/09/Whole-Language-High-Jinks-Moats.pdf>
- Moats, L. (2009). Still wanted: Teachers with knowledge of language. *Journal of Learning Disabilities*, 42(5), 387–391. <https://doi.org/10.1177/0022219409338735>
- Moats, L. C. (2005-2006). How spelling supports reading: And why it is more regular and predictable than you may think. *American Educator*. <http://asdn.org/wp-content/uploads/MoatsSpelling2005.pdf>
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, 31(2), 132–141. <https://doi.org/10.1080/00405849209543534>
- Morgan, A., Wilcox, B. R., & Eldredge, J. L. (2010). Effect of difficulty levels on second-grade delayed readers using dyad reading. *The Journal of Education Research*, 94(2), 113–119. <https://doi.org/10.1080/0022067009598749>
- Muter, V., Hulme, C., Snowling, M. J., & Stevenson, J. (2004). Phonemes, rimes, vocabulary, and grammatical skills as foundations of early reading development: Evidence from a longitudinal study. *Developmental Psychology*, 40(5), 665–681. <https://doi.org/10.1037/0012-1649.40.5.665>
- Nagy, W. E., & Anderson, R. C. (1984). How many words are there in printed school English? *Reading Research Quarterly*, 19(3) 304–330. <https://doi.org/10.2307/747823>
- National Academies of Sciences, Engineering, and Medicine. (2014). *Developing assessments for the next generation science standards*. The National Academies Press. <https://doi.org/10.17226/18409>
- National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. The National Academies Press. <https://doi.org/10.17226/24677>
- National Association for the Education of Young Children. (2020). *Developmentally appropriate practice: A position statement of the National Association for the Education of Young Children*. <https://tinyurl.com/mr2y4vcf>
- National Association of Early Childhood Specialists in State Departments of Education. (2013). *The power of kindergarten: 10 policies leading to positive child outcomes*. https://www.naecs-sde.org/_files/ugd/6a47e3_0749dd374c6f468587d8ef0012cd12fd.pdf
- National Center for Education Statistics (2019). Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress, 2019 Reading Assessment. <https://nces.ed.gov/nationsreportcard/pubs/stt2019/2020014.aspx>

- National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. U.S. Government Printing Office.
<https://doi.org/10.1037/e548602010-001>
- National Institute of Child Health and Human Development. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Report of the National Reading Panel*. (00-4769).
<https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf>
- National Institute of Child Health and Human Development Early Child Care Research Network (2005). Pathways to reading: The role of oral language in the transition to reading. *Developmental Psychology*, 41(2), 428–442. <https://doi.org/10.1037/0012-1649.41.2.428>
- National Research Council. (2002). *Investigating the influence of standards: A framework for research in mathematics, science, and technology education*. The National Academies Press. <https://doi.org/10.17226/10023>
- National Research Council. (2014). *Developing assessments for the next generation science standards*. The National Academies Press. <https://doi.org/10.17226/18409>.
- Neuman, S. B., & Wright, T. S. (2014). The magic of words: Teaching vocabulary in the early childhood classroom. *American Educator*, Summer, 4–13.
<https://www.aft.org/periodical/american-educator/summer-2014/magic-words>
- Nevo, E., & Vaknin-Nusbaum, V. (2018). Enhancing language and print-concept skills by using interactive storybook reading in kindergarten. *Journal of Early Childhood Literacy*, 18(4), 545–569. <https://doi.org/10.1177/1468798417694482>
- Northwest Evaluation Association. (2020, August 5). Not all assessment data is equal: Why validity and reliability matter. <https://www.nwea.org/resource-center/resource/not-all-assessment-data-is-equal-why-validity-and-reliability-matter/>
- Olson, R. K., Keenan, J. M., Byrne, B., & Samuelsson, S. (2014). Why do children differ in their development of reading and related skills? *Scientific Studies of Reading*, 18(1), 38–54 <https://doi.org/10.1080/10888438.2013.800521>
- Olson, R. K., Keenan, J. M., Byrne, B., & Samuelsson, S. (2019). Chapter 18 etiology of developmental dyslexia. In L. Verhoeven, C. Perfetti, & K. Pugh (Eds.), *Developmental Dyslexia Across Languages and Writing Systems* (pp. 391–412). <https://doi.org/10.1017/9781108553377.018>
- Ozuru, Y., Dempsey, K., & McNamara, D. (2009). Prior knowledge, reading skill, and text cohesion in the comprehension of science texts. *Learning and Instruction*, 19(3), 228–242. <https://doi.org/10.1016/j.learninstruc.2008.04.003>
- Pappas, C. C., Varelas, M., Barry, A., & Rife, A. (2002). Dialogic inquiry around information texts: The role of intertextuality in constructing scientific understandings in urban primary classrooms. *Linguistics and Education*, 13(4), 435–482. [https://doi.org/10.1016/s0898-5898\(03\)00004-4](https://doi.org/10.1016/s0898-5898(03)00004-4)
- Pearson, P. D., & Duke, N. K. (2002). Comprehension instruction in the primary grades. In C. Collins Block & M. Pressley (Eds.), *Comprehension Instruction: Research-Based Best Practices* (pp. 247–258). Guilford Press.
- Pearson, P. D., Hansen, J., & Gordon, C. (1979). The effect of background knowledge on young children's comprehension of explicit and implicit information. *Journal of Reading Behavior*, 11(3), 201–210. <https://doi.org/10.1080/10862967909547324>
- Pellegrino, J. W. (2006). *Rethinking and redesigning curriculum, instruction, and assessment: What contemporary research and theory suggests*. National Center on Education and the Economy for the New Commission on the Skills of the American Workforce. <http://www.me.umn.edu/~cliao/Pellegrino-Rethinking-and-Redesigning.pdf>.
- Pellegrino, J. W., & Hilton, M. (2012). *Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century*. The National Academies Press. <https://doi.org/10.17226/13398>
- Perfetti, C. A. (1985). Reading skills. In N. J. Smelser, & P. B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (1125–1129). Oxford. <https://sites.pitt.edu/~perfetti/PDF/Reading%20skills.pdf>
- Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful phonological awareness instruction with preschool children: Lessons from the classroom. *Topics in Early Childhood Special Education*, 28(1), 3–17. <https://doi.org/10.1177/0271121407313813>

- Piasta, S. B., Justice, L. M., McGinty, A. S., & Kaderavek, J. N. (2012). Increasing young children's contact with print during shared reading: Longitudinal effects on literacy achievement. *Child Development, 83*(3), 810–820. <https://doi.org/10.1111/j.1467-8624.2012.01754.x>
- Pierce, M. E., Wechsler-Zimring, A., Noam, G., Wolf, M., & Katzir, T. (2013). Behavioral problems and reading difficulties among language minority and monolingual urban elementary school students. *Reading Psychology, 34*(2), 182–205. <https://doi.org/10.1080/02702711.2011.626108>
- Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of Reading Research* (pp. 545–561). Erlbaum.
- Prince, P. (2012). Towards an instructional programme for L2 vocabulary: Can a story help? *Language Learning & Technology, 16*(3), 103–120. <https://psycnet.apa.org/record/2012-27399-007>
- Rasinski, T. (2004). Creating fluent readers. *Educational Leadership, 61*(6), 46–51. <https://www.ascd.org/el/articles/creating-fluent-readers>
- Rasinski, T. (2019, June 14). *Phonics instruction? Answer, not to use phonics when reading*. The Robb Review Blog. <https://therobbreviewblog.com/uncategorized/phonics-instruction-answer-not-to-use-phonics-when-reading/>
- Rasinski, T. (2020, December 13). *A little Latin (and Greek), and a whole lot of English building vocabulary with word roots*. The Robb Review Blog. <https://therobbreviewblog.com/uncategorized/a-little-latin-and-greek/>
- Rasinski, T. (2021, November 22). *Make word study (phonics, spelling, and vocabulary) a game!* Robb Review. The Robb Review Blog. <https://therobbreviewblog.com/uncategorized/make-word-study-phonics-spelling-and-vocabulary-a-game/>
- Rasinski, T. V., Yates, R., Foerg, K., Greene, K., Paige, D., Young, C., & Rupley, W. (2020). Impact of classroom-based fluency instruction on grade one students in an urban elementary school. *Education Sciences, 10*(9), 227. <https://doi.org/10.3390/educsci10090227>
- Rayner, K., Foorman, B. R., Perfetti, C. A., Pesetsky, D., & Seidenberg, M. S. (2001). How psychological science informs the teaching of reading. *Psychology Science in the Public Interest, 2*(2), 31–74. <https://doi.org/10.1111/1529-1006.00004>
- Reilly, R. G., & Radach, R. (2003). Foundations of an interactive activation of eye movement control in reading. In J. Hyona, R. Radach, & H. Deubel (Eds.) *The Mind's Eye: Cognitive and Applied Aspects of Eye Movement Research* (pp. 429–455). North-Holland. <https://doi.org/10.1016/b978-044451020-4/50024-4>
- Reutzel, D. R. (2015). Early literacy research: Findings primary-grade teachers will want to know. *The Reading Teacher, 69*(1), 14–24. <https://doi.org/10.1002/trtr.1387>
- Reutzel, D. R., Oda, L. K., & Moore, B. H. (1989). Developing print awareness: The effect of three instructional approaches on kindergarteners' print awareness, reading readiness, and word reading. *Journal of Reading Behavior, 21*(3), 197–217. <https://doi.org/10.1080/10862968909547673>
- Robertson, K. (n. d.). *Reading 101 for English Language Learners*. Colorín colorado. <https://www.colorincolorado.org/article/reading-101-english-language-learners>
- Rosenthal, J., & Ehri, L. C. (2008). The mnemonic value of orthography for vocabulary learning. *Journal of Educational Psychology, 100*(1), 175–191. <https://doi.org/10.1037/0022-0663.100.1.175>
- Ruddell, R. B. (1969, April 30–May 3). *Language acquisition and the reading process* [Paper presentation]. The International Reading Association Conference, Kansas City, MO, United States. (ED033819). ERIC. <https://files.eric.ed.gov/fulltext/ED033819.pdf>
- Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective reading instruction for struggling readers: the role of direct/explicit teaching. *Reading & Writing Quarterly, 25*(2–3), 125–138. <https://doi.org/10.1080/10573560802683523>
- Sandak, R., Mencl, W. E., Frost, S. J., & Pugh, K. R. (2004). The neurobiological basis of skilled and impaired reading: Recent findings and new directions. *Scientific Studies of Reading, 8*(3), 273–292. https://doi.org/10.1207/s1532799xssr0803_6
- Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman, & D. Dickinson (Eds.), *Handbook for Research in Early Literacy* (pp. 97–110). Guilford Press.

- Schachter, R. E., & Piasta, S. B. (2021). Doing assessment: A multicase study of preschool teachers' language and literacy data practices. *Reading Research Quarterly, 57*(2), 515–535. <https://doi.org/10.1002/rrq.419>
- Schatschneider, C., Fletcher, J. M., Francis, D. J., Carlson, C. D., & Foorman, B. R. (2004). Kindergarten prediction of reading skills: A longitudinal comparative analysis. *Journal of Educational Psychology, 96*(2), 265–282. <https://doi.org/10.1037/0022-0663.96.2.265>
- Schmoker, M. (2019, November 19). *How to make reading instruction much, much more efficient*. Education Week. <https://tinyurl.com/yx29dk56>
- Schwanenflugel, P. J., & Benjamin, R. G. (2017). Lexical prosody as an aspect of oral reading fluency. *Reading and Writing, 30*(1), 143–162. <https://doi.org/10.1007/s11145-016-9667-3>
- Scott, C. M., & Nelson, N. W. (2009). Sentence combining: Assessment and Intervention Applications. *Perspectives on Language Learning and Education, 16*(1), 14–20. <https://doi.org/10.1044/1le16.1.14>
- Shamir, A., & Shlafer, I. (2011). E-books' effectiveness in promoting phonological awareness and concepts about print: A comparison between children at risk for learning disabilities and typically developing kindergarteners. *Computers & Education, 57*(3), 1989–1997. <https://doi.org/10.1016/j.compedu.2011.05.001>
- Shanahan, T. (2017, July 24). *Phonics for English learners?* Reading Rockets. <https://www.readingrockets.org/blogs/shanahan-literacy/phonics-english-learners>
- Shanahan, T. (2018, April 28). *Should reading be taught whole class or small group?* Shanahan on Literacy. <https://tinyurl.com/lvj2nvkc4>
- Shanahan, T., & Lonigan, C. J. (2010). The national early literacy panel: A summary of the process and the report. *Educational Researcher, 39*(4), 279–285. <https://doi.org/10.3102/0013189x10369172>
- Share, D. L. (1995). Phonological recoding and self-teaching: *sine qua non* of reading acquisition. *Cognition, 55*(2), 151–218. [https://doi.org/10.1016/0010-0277\(94\)00645-2](https://doi.org/10.1016/0010-0277(94)00645-2)
- Shefelbine, J. L. (1990). Student factors related to variability in learning word meanings from context. *Journal of Reading Behavior, 22*(1), 71–97. <https://doi.org/10.1080/10862969009547695>
- Snell, J., & Theeuwes, J. (2020). A story about statistical learning in a story: Regularities impact eye movements during book reading. *Journal of Memory and Language, 113*, Article 104127. <https://doi.org/10.1016/j.jml.2020.104127>
- Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing Reading Difficulties in Young Children*. National Academy Press. <https://doi.org/10.17226/6023>
- Sparks, R. L., Patton, J., & Murdoc, A. (2014). Early reading success and its relationship to reading achievement and reading volume: Replication of '10 years later.' *Reading and Writing, 27*(1), 189–211. <https://doi.org/10.1007/s11145-013-9439-2>
- Spear-Swerling, L. (2016). Listening comprehension, the Cinderella skill. *Perspectives on Language and Literacy, Summer*, 9–15. <https://dyslexialibrary.org/wp-content/uploads/file-manager/public/1/Summer%202016%20Final%20Spear-Swerling%20p9-15.pdf>
- Spear-Swerling, L. (2019). Structured literacy and typical literacy practices: Understanding differences to create Instructional opportunities. *Teaching Exceptional Children, 51*(3), 201–211. <https://doi.org/10.1177/0040059917750160>
- Spira, E. G., & Fischel, J. E. (2005). The impact of preschool inattention, hyperactivity, and impulsivity on social and academic development: A review. *Journal of Child Psychology and Psychiatry, 46*(7), 755–773. <https://doi.org/10.1111/j.1469-7610.2005.01466.x>
- Stahl, S. A., & Murray, B. (1998). Issues involved in defining phonological awareness and its relation to early reading. In *Word Recognition in Beginning Literacy* (pp. 65–87). <https://doi.org/10.4324/9781410602718-8>
- Stahl, S. A., Duffy-Hester, A. M., & Dougherty Stahl, K. A. (2006). Everything you wanted to know about phonics (but were afraid to ask). In K. A. Dougherty Stahl, & M. C. McKenna (Eds.), *Reading Research at Work: Foundations of Effective Practice* (pp. 126–147). Guilford Publications.
- Stanovich, K. E. (1984). The interactive-compensatory model of reading: A confluence of developmental, experimental, and educational psychology. *Remedial and Special Education, 5*(3), 11–19. <https://doi.org/10.1177/074193258400500306>

- Stanovich, K. E. (2009). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Journal of Education*, 189(1-2), 23–55. <https://doi.org/10.1177/0022057409189001-204>
- Stempel-Mathey, L. (1999). In J. R. Birsh (Ed.), *Multisensory Teaching of Basic Language Skills*. Paul H. Brookes Publishing Co.
- Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38(6), 934–947. <https://doi.org/10.1037/0012-1649.38.6.934>
- Stotsky, S. (2016). What American kids are reading now. *Academic Questions*, 29(2), 188–197. <https://doi.org/10.1007/s12129-016-9568-6>
- Sunde, K., Furnes, B., & Lundetrae, K. (2020). Does introducing the letters faster boost the development of children's letter knowledge, word reading, and spelling in the first year of school? *Scientific Studies of Reading*, 24(2), 141–158. <https://doi.org/10.1080/10888438.2019.1615491>
- Taber, K. S. (2018). Scaffolding learning: principles for effective teaching and the design of classroom resources. In M. Abend (Ed.), *Effective Teaching and Learning: Perspectives, Strategies and Implementation* (pp. 1–43). Nova Science Publishers.
- Taylor, S. E., Willmon Nieroroda, B., & Birsner, E. P. (1989). *EDL Core Vocabularies in Reading, Mathematics, Science, and Social Studies*. Steck-Vaughn.
- Treiman, R. (2006). Knowledge about letters as a foundation for reading and spelling. In R. M. Joshi, & P. G. Aaron (Eds.), *Handbook of Orthography and Literacy* (pp. 581–599). Earlbaum.
- Treiman, R., Tincoff, R., Rodriguez, K., Mouzaki, A. I., & Francis, D. J. (1998). The foundations of literacy: learning the sounds of letters. *Child Development*, 69(6), 1524–1540. <https://doi.org/10.1111/j.1467-8624.1998.tb06175.x>
- Ukrainetz, T. A., Nuspl, J. J., Wilkerson, K., & Beddes, S.R. (2011). The effects of syllable instruction on phonemic awareness in preschoolers. *Early Childhood Research Quarterly*, 26(1), 50–60. <https://doi.org/10.1016/j.ecresq.2010.04.006>
- United States Department of Education. (n. d.). *Our nation's English learners: What are their characteristics*. Retrieved March 17, 2022 from, <https://www2.ed.gov/datastory/el-characteristics/index.html>
- United States Department of Education, Office of Educational Technology. (2017, January). *Reimagining the role of technology in education: 2017 national education technology plan update*. <https://tech.ed.gov/files/2017/01/NETP17.pdf>
- Vacca, R. T, Mraz, M., & Vacca, J. A. L. (2021). *Content Area Reading: Literacy and Learning Across the Curriculum* (13th Ed.). Pearson Education, Inc.
- van Gog, T., Ericsson, K. A. R., Rikers, M. J. P., & Paas, F. (2005). Instructional design for advanced learners: Establishing connections between the theoretical frameworks of cognitive load and deliberate practice. *Educational Technology Research and Development*, 53(3), 73–81. <https://doi.org/10.1007/BF02504799>
- Vera, D. (2011). Using popular culture print to increase emergent literacy skills in one high-poverty urban school district. *Journal of Early Childhood Literacy*, 11(3), 307–330. <https://doi.org/10.1177/1468798411409297>
- Vertecchi, B. (2016). I bambini e la scrittura: L'esperimento *Nulla dies sine linea*. Italy: FrancoAngeli.
- Vines, N., Jordan, J., & Broemmel, A. (2020). Reenvisioning spelling instruction: Developmental word study nonnegotiables. *The Reading Teacher*, 73(6), 711–722. <https://doi.org/10.1002/trtr.1882>
- Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press. <https://doi.org/10.2307/j.ctvjf9vz4>
- Washington, J. A., & Seidenberg, M. S. (2021). Teaching reading to African American children: When home and school language differ. *American Educator*, Summer, 26–41.
- Weisberg, R. P., & Cascarino, J. (2013). Academic learning + social-emotional learning = national priority. *Phi Delta Kappan*, 95(2), 8–13. <https://doi.org/10.1177/003172171309500203>
- Weiser, B., & Mathes, P. (2011). Using encoding instruction to improve the reading and spelling performances of elementary students at risk for literacy difficulties: A best-evidence synthesis. *Review of Educational Research*, 81(2), 170–200. <https://doi.org/10.3102/0034654310396719>

- Wesseling, P. B., Christmann, C. A., & Lachmann, T. (2017). Shared book reading promotes not only language development, but also grapheme awareness in German kindergarten children. *Frontiers in Psychology* 8, 1–14. <https://doi.org/10.3389/fpsyg.2017.00364>
- Westby, C. (2012). Dynamic systems theory applied to language/literacy learning. In B. Culatta, K. M. Hall-Kenyon, & S. Black (Eds.), *Systematic and Engaging Early Literacy Instruction and Intervention* (pp. 27–56). Plural Publishing Inc.
- Wexler, N. (2020). Building knowledge: What an elementary school curriculum should do. *American Educator*, 44(2), 18–21.
- Wharton-McDonald, R. M. (2018). The role of word recognition in beginning reading. In C. M. Cassano, & S.M. Dougherty (Eds.), *Pivotal Research in Early Literacy: Foundational Studies and Current Practices* (pp. 142–159). Guilford Press.
- Willows, D. M., & Ryan, E. D. (1986). The development of grammatical sensitivity and its relationship to early reading achievement. *Reading Research Quarterly*, 21(3), 253–266. <https://doi.org/10.2307/747708>
- Wittrock, M. C. (1983). Writing and the teaching of reading. *Language Arts*, 60(5), 600–606.
- Wolter, J. A., & Green, L. (2013). Morphological awareness intervention in school-age children with language and literacy deficits: A case study. *Topics in Language Disorders*, 33(1), 27–41. <https://doi.org/10.1097/tld.0b013e318280f5aa>
- Wylie, R. E., & Durrell, D. D. (1970). Teaching vowels through phonograms. *Elementary English*, 47(6), 787–791.
- Yang, M., Cooc, N., & Sheng, L. (2017). An investigation of cross-linguistic transfer between Chinese and English: A meta-analysis. *Asian-Pacific Journal of Second and Foreign Language Education* 2, 15. <https://doi.org/10.1186/s40862-017-0036-9>
- Yeh, S. S. (2003). An evaluation of two approaches for teaching phonemic awareness to children in Head Start. *Early Childhood Research Quarterly*, 18(4), 513–529. <https://doi.org/10.1016/j.ecresq.2003.09.009>
- Zemlock, D., Vinci-Booher, S., & James, K. (2018). Visual-motor symbol production facilitates letter recognition in young children. *Reading and Writing: An Interdisciplinary Journal*, 31(6): 1255–1271. <https://doi.org/10.1007/s11145-018-9831-z>
- Zeno, S. M., Ivens, S. H., Millard, R. T., & Duvvuri, R. (1995). *The Educator's Word Frequency Guide*. Touchstone Applied Science Associates.