

# Designing and Implementing a Successful Reading Program with Digital Solutions



A How-To Guide from Edmentum

# Unlock Lifelong Success with Reading

The landscape of education is rich with phrases like “read by the third grade,” “learn to read so you can read to learn,” and “cracking the code of reading.” These expressions underscore the essential role of reading skills in laying the foundation for future academic success. As you support students’ varying needs to help them meet each reading milestone, education technology grounded in the five essential pillars of reading can be a powerful tool to have in your back pocket.

In this workbook, we’ll evaluate the many facets of structuring an effective, research-based reading and language arts block and help you select the appropriate technology tools to support your approach.

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# The Science of Reading

Reading is a “must have” skill that you—being able to read this—are fortunate to possess. Reading is like owning a passkey that unlocks the door to unlimited possibilities. You have the reading passkey. Why else is the reading passkey so valuable?

- It throws open the global library of knowledge about any and every topic.
- It unlocks insights, helping you find answers to questions about yourself and others.
- It allows you to escape to other times and places when you need to.
- It helps you expand your perspective and dreams.
- It opens the doors to places you might never get to visit, to experiences you might never be able to have.
- It opens opportunities for jobs and allows for easier navigation of essential life skills.

The reading passkey is something that every human has the right to have, but it needs to be intentionally developed using skills that match learners' needs. Thankfully, there's multi-disciplinary research from education, psychology, linguistics, and neuroscience that guides how to teach reading. We've come to understand this as the science of reading and it has a profound impact on providing the reading passkey to all learners.

So, let's get right to it. What is the science of reading, and how can you be sure you are using it? The first step is understanding the 5 pillars of reading brought forward by scientifically based reading research.



# The Five Pillars: Phonemic Awareness

Think about phonemic awareness as something that can be done in the dark. Learning to orally manipulate the approximate 44 phonemes in the English language doesn't require being able to read printed letters. Instead, through phonemic awareness strategies, the brain is able to learn individual phonemes, then progress to join phonemes, and finally, to build words with phonemes.

As part of developing phonemic awareness, the introduction of phonics skills must quickly follow. Research shows that teaching sounds along with letters of the alphabet helps students better understand how phonemic awareness relates to their reading and writing.

## pho·ne·mic a·ware·ness \fə-'nē-mik\ ə-'wer-nəs\

The ability to hear, identify, manipulate, and substitute phonemes—the smallest units of sound that can differentiate meaning—in spoken words

Segmenting a word into its separate sounds



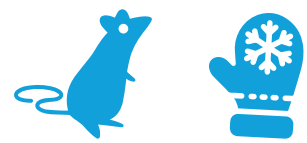
/sh/ /i/ /p/

Blending separate sounds together to form a word



duck

Recognizing words that begin or end with the same sound



mouse  
and  
mitten

### Evaluate Reading Technology Programs:

Are varied activities used to explore phonemic awareness?	1	2	3	N/A
Are students given multiple opportunities to practice manipulating sounds?	1	2	3	N/A
Does instruction include a focus on word families, syllables, and rhyming?	1	2	3	N/A
Are students able to work at their own pace and bypass mastered content?	1	2	3	N/A

Ranking Scale | 1 = does not fulfill program goals | 2 = meets program goals | 3 = exceeds program goals

# The Five Pillars: Phonics

Phonics is the crucial link between what learners hear and how they read and write. Known as “cracking the code” on reading, research indicates that building a memory bank of letter-sound relationships through systematic and sequenced instruction is found to be an effective approach to building phonics skills.

Critics of phonics instruction argue that the English language includes many irregular spellings that don't incorporate predictable phonics patterns. However, phonics instruction does teach children a system for the brain to commit words to memory, which, in turn, helps them read, spell, and recognize words instantly.

## pho·nics \fä-niks\

Understanding the predictable relationship between phonemes (sounds) and graphemes (letters) in order to associate written letters with the sounds of spoken language

Introduce and practice letter-sound relationships



/ch/ is spelled

C-H

Use known letter-sound correspondences to blend and segment words



dog or /d/ /o/ /g/ is spelled

D-O-G

Recognize and write letter combinations by separating words into onset and rime



tree or /tr/ /ee/ is spelled

T-R-E-E

## Evaluate Reading Technology Programs:

Is phonics explicitly taught through modeled, guided, and independent strategies?	1	2	3	N/A
Does instruction use authentic texts to apply phonics skills?	1	2	3	N/A
Are tools available for offline written or multi-sensory practice?	1	2	3	N/A
Is phonics emphasized and reinforced to a level of automaticity?	1	2	3	N/A

Ranking Scale | 1 = does not fulfill program goals | 2 = meets program goals | 3 = exceeds program goals

# The Five Pillars: Fluency

Fluency is critical to building a child’s motivation to read. When the brain has to focus on what each word means, reading is often a laborious task. For young readers who regularly interact with the same texts over and over again, memorization might be mistaken for fluency. Actual fluent reading however, is developed with the repeated, accurate sounding out of words.

As students begin to acquire words more easily, they should also practice dividing text into meaningful chunks, knowing when to pause and change intonation and tone. With regular guidance and feedback, fluent readers can demonstrate their skills through natural reading that sounds as if they are speaking.

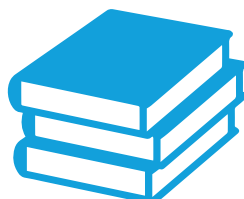
## flu·en·cy /'flōənsē/

The ability to read text accurately, quickly, and expressively, either to oneself or aloud; refer to the National Assessment of Educational Progress (NAEP) fluency scale for progression of this skill

Listen to fluent reading by a peer, teacher, or online program



Apply phonics skills to read unfamiliar texts accurately



Practice reading passages multiple times to develop expression and intonation



### Evaluate Reading Technology Programs:

Does the program include a fluency screener or running record component?	1	2	3	N/A
Does the program include authentic texts to practice applying fluency skills?	1	2	3	N/A
Are students presented with examples of fluent reading through text-to-speech or read-aloud features?	1	2	3	N/A
Are students able to work with the same text in multiple contexts to practice rereading?	1	2	3	N/A

Ranking Scale | 1 = does not fulfill program goals | 2 = meets program goals | 3 = exceeds program goals

# The Five Pillars: Vocabulary

It goes without saying that to comprehend reading, one must first know what most of the words mean. Most vocabulary is absorbed indirectly through everyday experiences in conversation, actively listening to read-aloud texts, or independent reading.

Beginning readers use their oral vocabulary to make sense of the words they see in print. When their oral vocabulary comes up short, reading is momentarily interrupted until that new word is learned, in both form and meaning. This being the case, direct instruction of explicitly taught vocabulary, as well as word-learning strategies, can help build a flourishing vocabulary and improve reading fluency and comprehension.

## vo·cab·u·lar·y \vō-ˈka-byə-ler-ē\

The growing, stored compilation of words that students understand and use in their conversation (oral vocabulary) and recognize in print (reading vocabulary)

Apply understanding of morphemes to uncover meaning of a new word

Use context clues to understand unknown words

Engage in rich oral language experiences to build vocabulary

## dis - appear

**dis** = opposite of,  
**appear** = the way to come into view



The stars were **brilliant** in the clear night sky.

h	o	l	k	n	v
x	f	h	o	j	g
h	v	o	c	a	b
l	e	l	l	i	e
n	v	c	d	e	r
h	k	k	i	j	l

### Evaluate Reading Technology Programs:

Is extensive independent reading facilitated to expand word knowledge?	1	2	3	N/A
Are students explicitly taught word-learning strategies?	1	2	3	N/A
Is rich instruction of vocabulary words infused into learning?	1	2	3	N/A
Is repetition of vocabulary infused into instruction?	1	2	3	N/A

Ranking Scale | 1 = does not fulfill program goals | 2 = meets program goals | 3 = exceeds program goals

# The Five Pillars: Comprehension

Comprehension puts all the pieces together to help students become proficient readers. Even before children are reading for themselves, they can begin practicing comprehension skills when books are read aloud to them. Predicting, inferring, making connections, and analyzing what is read are all skills that can be modeled and practiced with an adult and help prepare students to do this work independently.

Students who reach the stage of comprehending what they read become active readers. They use metacognitive strategies to think about the purpose of texts and monitor their own understanding as they read. This allows them to isolate and verbalize where they may be confused, which, in turn, opens doors for them to apply specific strategies to make sense of what they read.

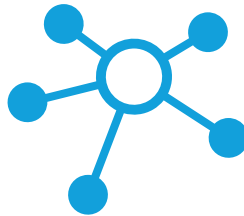
## com·pre·hen·sion \käm-pri-'hen(t)-shən\

The ability to understand, remember, and make meaning of what has been read—this is the purpose of reading

“Think about thinking” to monitor understanding and fix comprehension problems



Examine and illustrate relationships between concepts



Search for textual evidence to answer questions



### Evaluate Reading Technology Programs:

Are comprehension strategies explicitly taught and modeled?	1	2	3	N/A
Are students given multiple opportunities to apply comprehension strategies across varying texts?	1	2	3	N/A
Are tools such as graphic organizers and diagrams available to illustrate concepts?	1	2	3	N/A
Do questions challenge students to search for textual evidence?	1	2	3	N/A

Ranking Scale | 1 = does not fulfill program goals | 2 = meets program goals | 3 = exceeds program goals



# Reflect on Reading Instruction

Based on what you've learned so far about the science of reading, learning milestones, and the five essential pillars, what would you like to start, stop, and continue doing to improve reading instruction?

 **START**

 **STOP**

 **CONTINUE**

Think about your current reading program. As you evaluate resources—including personnel, professional development, and instructional tools—what key takeaways have you identified across each of the five pillars of reading?

Phonemic Awareness

Phonics

Fluency

Vocabulary

Comprehension

# Distinguish Between Reading Assessments

It goes without saying that effective teaching and learning includes assessment. From determining if early learners have grasped all their letters and sounds, to administering ongoing fluency checks, and ultimately testing for comprehension, assessment should be a regular extension of your reading instruction.

When you're evaluating online programs to support your reading goals, consider the breadth and quality of the assessments they include. Here's a look at four common assessment categories.

## Universal Screener

**Why?** An assessment *for* learning to provide an early indicator of at-risk students and determine if a closer look is needed using cut scores

Fall Winter Spring

**How?** Brief valid, reliable assessments, such as fluency checks administered in a 1:1 setting to all students

## Diagnostic

**Why?** An assessment *for* learning to determine specific strengths and needs, allocate intervention resources, and identify learners needing acceleration

Fall Winter Spring

**How?** District, state, or schoolwide interim assessments evaluate students against a desired set of standards or skills, usually administered after an initial screener to some *or* all students

## Progress Monitor

**Why?** An assessment *for* learning to track progress over time and determine actions needed to ensure students receive immediate support like in-class intervention or reteach

Periodic Intervals

**How?** Short and succinct probes, formative assessments, small group observations, running records with error analysis

## Summative

**Why?** An assessment *of* learning to measure school, district, and state achievement and determine grade promotion

End Of The Year

**How?** High-stakes exams include required state assessments administered to all students to determine mastery of a specific set of grade-level standards

# A Student's Reading Assessment Experience



## Meet Ben, a 5th grader at Washington Elementary School.

### Screener

A short fluency screener at the beginning of the school year measures how many words Ben can read per minute, indicating he is reading below grade level.

### Diagnostic

Ben completes a reading diagnostic assessment to determine his specific strengths and needs across each subject domain.

### Progress Monitor

Throughout regular in-class and online instruction, Ben's teachers keep tabs on his progress via small-group observations and biweekly formative assessments.

### Screener

Later that winter, Ben completes another fluency check where data reveals that Ben is still below grade level.

### Diagnostic

A second reading diagnostic assessment provides additional detail, showing that Ben has demonstrated growth in the areas of phonics and vocabulary.

### Progress Monitor

Ben's teachers double down on working with him on specific comprehension and fluency skills that he is still struggling with while also tracking his progress.

### Screener + Diagnostic

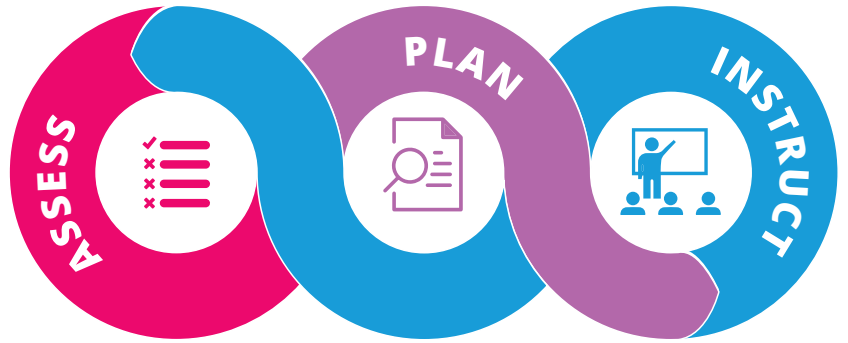
In early spring, Ben's cut scores reveal he is reading on grade level, while his diagnostic score shows that he only lacks a few specific skills in one domain to demonstrate grade-level mastery.

### Progress Monitor + Summative

With effective personalized instruction and ongoing progress monitoring, Ben and his teacher can both feel confident that he will meet all grade-level expectations on his upcoming summative assessments.

# Reflect on Reading Assessment

Stop and think about your current assessment practices to support reading instruction. Consider what tools you use today and the role they play in your instructional process, as well as what adjustments you might make so that assessment remains an integral component of your lesson planning.



What assessments does my school or district have in place today?

- Universal Screener     
  Diagnostic     
  Progress Monitor     
  Summative

How often is each assessment used and for what population of students?

Universal Screener	Diagnostic	Progress Monitor	Summative

What key data points are tracked by each assessment?

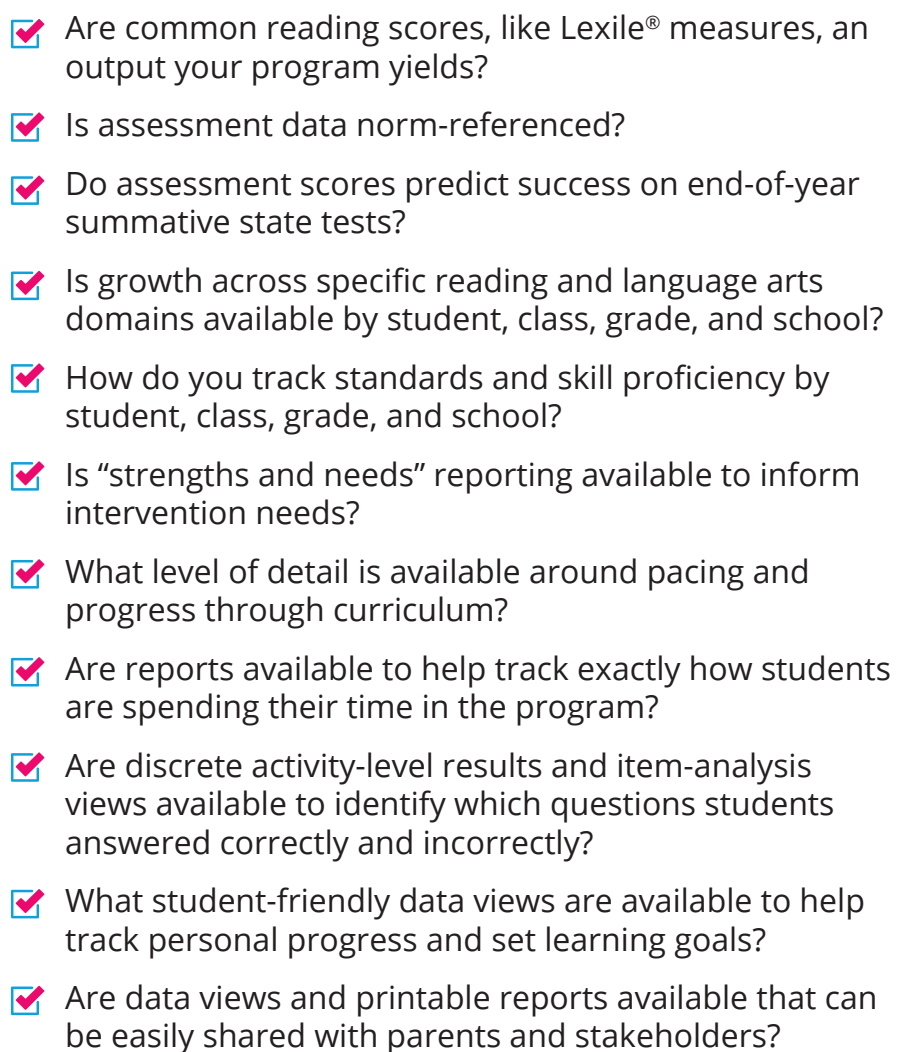
Universal Screener	Diagnostic	Progress Monitor	Summative

How does each assessment guide instructional planning?

Universal Screener	Diagnostic	Progress Monitor	Summative

# Select the Right Data Tools

Understanding the value of growth and proficiency puts you one step closer to consuming data in meaningful ways, but with all the real-time reports and interactive data views out there, how do you get just what you need to take action? Here are a few of the key questions you should be asking when evaluating data outputs from online reading programs:

- 
- Are common reading scores, like Lexile® measures, an output your program yields?
  - Is assessment data norm-referenced?
  - Do assessment scores predict success on end-of-year summative state tests?
  - Is growth across specific reading and language arts domains available by student, class, grade, and school?
  - How do you track standards and skill proficiency by student, class, grade, and school?
  - Is “strengths and needs” reporting available to inform intervention needs?
  - What level of detail is available around pacing and progress through curriculum?
  - Are reports available to help track exactly how students are spending their time in the program?
  - Are discrete activity-level results and item-analysis views available to identify which questions students answered correctly and incorrectly?
  - What student-friendly data views are available to help track personal progress and set learning goals?
  - Are data views and printable reports available that can be easily shared with parents and stakeholders?

# Structure Your Reading Block

With an understanding of the science of reading and the role that assessment plays in place, it's time to turn to the actual structure of your reading block. Of course, class schedules can differ particularly between elementary and secondary schools, and often, your schedule is not up for debate. However, that doesn't mean you can't make the most of each instructional minute within your current structure by incorporating various proven techniques.



## Read Aloud

**What:** The teacher reads a book, poem, or article to the entire class

**Why:** To model good reading behaviors, including fluency, and to develop comprehension skills by asking questions and leading discussions about books before, during, and after reading



## Shared Reading

**What:** The teacher and students read chorally from a single text

**Why:** To build phonics skills by practicing decoding, increasing reading fluency and accuracy, and also advancing comprehension strategies by teaching key skills before, during, and after reading



## Guided Reading

**What:** A small group of students of similar reading abilities work with the teacher, reading a text that is on their instructional level, while the teacher offers instruction and support based on specific skill needs as determined by ongoing assessment

**Why:** To develop phonics, fluency, and comprehension using mini-lessons and focused instruction

### Elementary

ELA instruction consumes the largest part of the teaching day, with intentional cross-curricular lessons in math, social studies, and science

### Secondary

Not all instructional elements may be present, but these fundamental tactics could take shape in a different form

# Structure Your Reading Block



## Independent Reading

**What:** Students choose and read books at their independent reading level (with 95% accuracy)

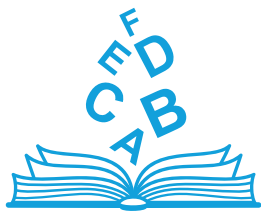
**Why:** To improve phonics, fluency, and reading comprehension independently; students may spend time both reading and journaling their thoughts to self-monitor their own comprehension



## The Reading-Writing Connection

**What:** Teachers scaffold instruction to support students as they become increasingly more responsible for demonstrating their ability to use writing skills and strategies; this includes modeling, guided or interactive writing, and independent writing

**Why:** To develop writing skills and strategies by modeling and asking students to use the stages of the writing process to communicate with others



## Word Study

**What:** The teacher provides explicit instruction that covers the building blocks of the English language

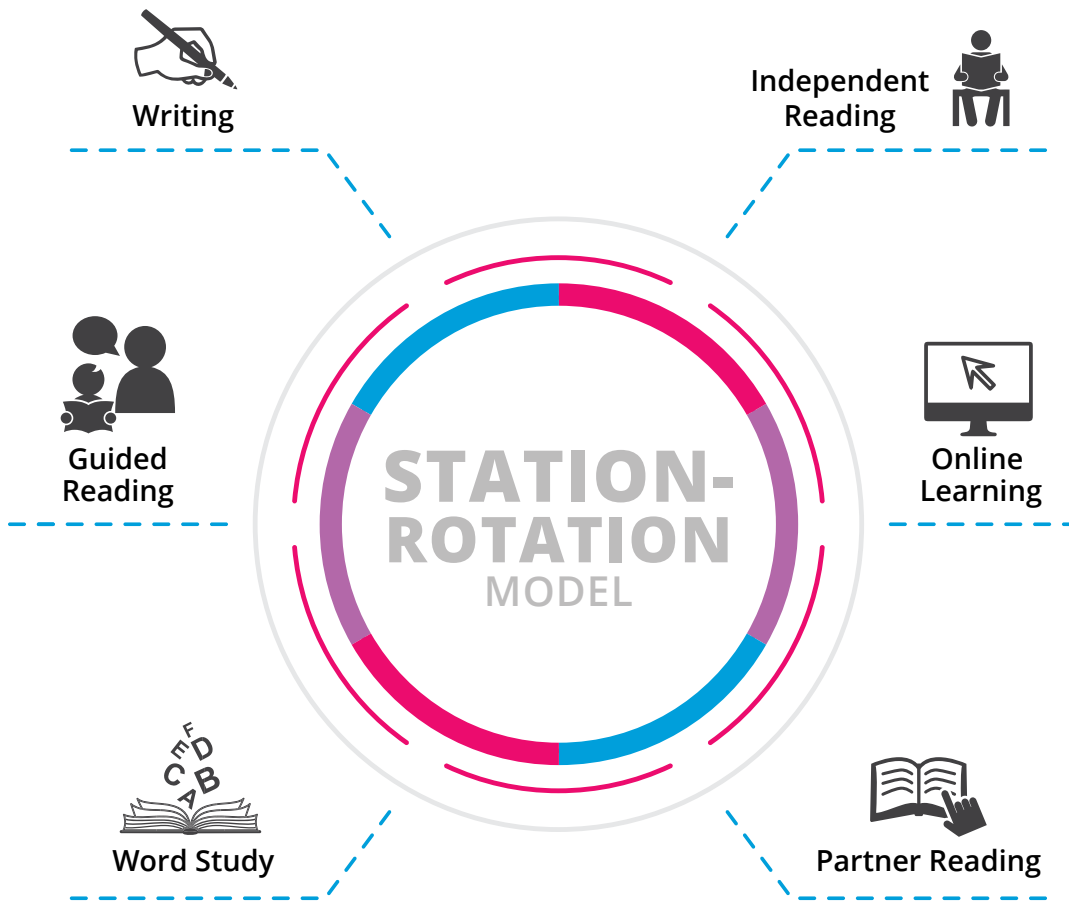
**Why:** To ensure that students are able to decode and comprehend text easily, word study focuses on phonological awareness, phonics skills, and word and structural analysis

What elements of this structure will you begin incorporating or continue elevating in your reading block? Why is each important for the specific needs of your students?

# Prepare for Implementation Success

Once you've identified the instructional components you want to focus on bolstering in your reading block, it's time to start planning for classroom implementation.

In elementary grades, whole-class instruction and practice, small-group instruction and practice, and independent reading and practice are required to keep up with individualized learning needs as revealed by monitoring and assessment across the ELA domains. The most practical way to achieve this is through the use of a station-rotation model, in which students move to learning centers as needed outside of whole-class instruction time. At these stations, students can receive just the right level of teacher support--or read and practice independently or with their peers--as they work on mastering particular skills. In this model, the most common use of small-group time is to engage with students in guided reading.



**Incorporating the use of a station-rotation model is a popular method both for the autonomy it allows young students and the way it naturally encourages the use of technology—even without a classroom set of devices!**



# Prepare for Implementation Success

When it comes to identifying technology's place in your station-rotation model, remember that digital reading programs can provide you with valuable tools including student reports, printable activities, and even online personalized learning paths. Consider how your tech tools can be leveraged in different rotations:

## Guided Reading

This small-group experience should always be teacher-led, but it doesn't mean that your reading program can't help guide instruction. Review your data on specific reading domains, skills, or standards to quickly sort students into similar-ability groups each week. Leverage supplemental lesson ideas or printables to structure this learning time.

## Online Learning

Here, students can use classroom devices to hop into an online reading platform of your choice. Ensure that students can log in quickly and get started on appropriate materials that they can complete independently. Coach your students to make the most of this rotation so that you can track actual progress and growth during planning time or after school.

## Independent Reading

Many teachers cultivate robust classroom libraries to help inspire a love of reading. But, what if you don't have all the books you need? Online programs can provide up-to-date Lexile measures to help students self-select stories on their reading level, and some may even include searchable digital libraries that can double the materials your students have to choose from.



# Your Science of Reading Partner

Founded in innovation, Edmentum is committed to being your most trusted partner in creating successful student outcomes everywhere learning occurs. It is this commitment that inspired us when we pioneered online education over 50 years ago, and it's what continues to inspire us to meet your evolving needs today.

## 1. Program Needs Analysis

Review online reading strategies and best practices

## 2. Implementation & Onboarding

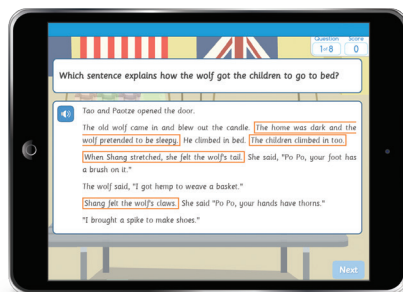
Tailor onboarding process to meet the specific needs of your educators

## 3. Professional Development

Offer continuous support focused on preparing and sustaining a successful reading program

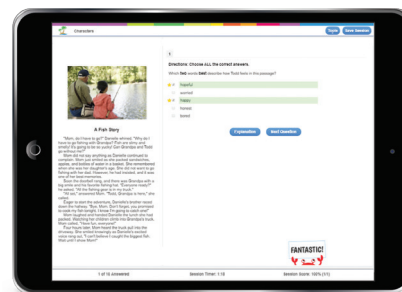
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