Reading & Literacy: Designing and Implementing a Successful Program

A How-To Guide from Edmentum
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 literacy-centric expressions underscore the essential role of literacy 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 literacy 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.
Approaches to Literacy: How Far We’ve Come

If you crack open a history book on literacy, you’ll find many different approaches that have created great debate over the last century (or more). Take a look at the three most popular methods from the last 50 years and how the role of technology has evolved in the process to see how far we’ve come.

1970-1990s: Phonics
Helps students develop meaningful prereading skills but deemphasizes applying skills in other contexts to make meaning of what one reads

Late 1980s and 1990s: Whole Language
Focuses on applying various reading strategies but doesn’t always provide learners with the phonetic fundamentals to approach difficult vocabulary

Late 1980s to today: Balanced Literacy
Combines elements of both previous approaches via modeled, shared, guided, and independent learning experiences

1960: PLATO Learning
The first computer-assisted instruction system, PLATO, is developed

1990: Digital Natives
The first generation of digital natives is born, and the concept of e-learning becomes a widely recognized term

2002: Internet Access
According to the National Center for Education Statistics (NCES), about 99% of American public schools have Internet access
Key Literacy Milestones

By age 3, there is a 30-million-word gap between children from the wealthiest and poorest families.

Reading abilities look different at every age. As you consider milestones commonly experienced throughout formal education, ask yourself if students are set up for success.

Preschool
- Recognize that words tell a story
- Start matching letter sounds to letters of the alphabet

Kindergarten
- Read simple sight words
- Recognize and produce words that rhyme
- Sound out new words using phonics and word families

First Grade
- Use pictures and context clues to decode unfamiliar words
- Start answering questions that require thinking about what is read
- Write by organizing details into a logical sequence with a beginning, middle, and end
Key Literacy Milestones

Second to Third Grade
- Read aloud accurately and with expression
- Use new words, phrases, or figures of speech that are heard
- Ask and answer questions about stories read, referring back to the text to support answers

Fourth to Eighth Grade
- Transition from learning to read to reading to learn
- Read with purpose to extract specific information
- Correctly identify major elements of stories, like time, place, plot, problem, and resolution

Ninth to Twelfth Grade
- Analyze, synthesize, and evaluate ideas from texts
- Make inferences and draw conclusions about what is read
- Identify examples of imagery and symbolism

The summer learning slide can add up to the equivalent of three years of reading loss by the end of fifth grade.
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** \fa- 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

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Segmenting a word into its separate sounds

Blending separate sounds together to form a word

Recognizing words that begin or end with the same sound

/sh/ /i/ /p/

**duck**

mouse

and

mitten

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**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
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.

**phonics \fæ-niks\**

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

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**Evaluate Reading Technology Programs:**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Ranking Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is phonics explicitly taught through modeled, guided, and independent strategies?</td>
<td>1 2 3 N/A</td>
</tr>
<tr>
<td>Does instruction use authentic texts to apply phonics skills?</td>
<td>1 2 3 N/A</td>
</tr>
<tr>
<td>Are tools available for offline written or multi-sensory practice?</td>
<td>1 2 3 N/A</td>
</tr>
<tr>
<td>Is phonics emphasized and reinforced to a level of automaticity?</td>
<td>1 2 3 N/A</td>
</tr>
</tbody>
</table>

**Ranking Scale**

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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 / flōansē/**

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

**Evaluate Reading Technology Programs:**

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

*Ranking Scale*  
1 = does not fulfill program goals  
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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, readings aloud from adults, 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-bə-lər-ē\ 

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

<table>
<thead>
<tr>
<th>Apply understanding of morphemes to uncover meaning of a new word</th>
<th>Use context clues to understand unknown words</th>
<th>Engage in rich-oral language experiences to build vocabulary</th>
</tr>
</thead>
</table>

**dis - appear**

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

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

Evaluate Reading Technology Programs:

<table>
<thead>
<tr>
<th>Evaluate Reading Technology Programs:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is extensive independent reading facilitated to expand word knowledge?</td>
<td></td>
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<td></td>
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<tr>
<td>Are students explicitly taught word-learning strategies?</td>
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<td></td>
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<tr>
<td>Is rich instruction of vocabulary words infused into learning?</td>
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<tr>
<td>Is repetition of vocabulary infused into instruction?</td>
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</tbody>
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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.

**comprehension** \( \text{kām-ˈprē-hen(t)-shən} \)

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

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**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**

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Reflect on Literacy Instruction

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

Think about your current literacy 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?

<table>
<thead>
<tr>
<th></th>
<th>START</th>
<th>STOP</th>
<th>CONTINUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phonemic Awareness</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Phonics</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Fluency</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vocabulary</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Comprehension</td>
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</tbody>
</table>
Distinguish Between Literacy 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 instruction.

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

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Why?</th>
<th>How?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Universal Screener</strong></td>
<td>An assessment for learning to provide an early indicator of at-risk students and determine if a closer look is needed using cut scores</td>
<td>Brief valid, reliable assessments, such as fluency checks administered in a 1:1 setting to all students</td>
</tr>
<tr>
<td><strong>Progress Monitor</strong></td>
<td>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</td>
<td>Short and succinct probes, formative assessments, small group observations, running records with error analysis</td>
</tr>
<tr>
<td><strong>Diagnostic</strong></td>
<td>An assessment for learning to determine specific strengths and needs, allocate intervention resources, and identify learners needing acceleration</td>
<td>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</td>
</tr>
<tr>
<td><strong>Summative</strong></td>
<td>An assessment of learning to measure school, district, and state achievement and determine grade promotion</td>
<td>High-stakes exams include required state assessments administered to all students to determine mastery of a specific set of grade-level standards</td>
</tr>
</tbody>
</table>
Meet Ben, a 5th grader at Washington Elementary School.

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.

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

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

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

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

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

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.

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.
Stop and think about your current assessment practices to support literacy. 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?

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Frequency</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Screener</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic</td>
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<td></td>
</tr>
<tr>
<td>Summative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What key data points are tracked by each assessment?

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Data Points</th>
</tr>
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<tbody>
<tr>
<td>Universal Screener</td>
<td></td>
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<td></td>
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</table>

How does each assessment guide instructional planning?

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Instructional Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Screener</td>
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</table>
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?
With an understanding of basic literacy principles and the role that assessment plays in place, it’s time to turn to the actual structure of your literacy 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 literacy-building 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

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

**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

**Writing**
**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
Once you’ve identified the instructional components you want to focus on bolstering in your literacy block, it’s time to start planning for classroom implementation. While some elements of a balanced literacy structure are more easily defined, guided reading is probably the most open to interpretation.

In elementary grades, guided reading is achieved by using a station-rotation model, in which students rotate through a fixed schedule of learning centers to focus on different components of literacy while the teacher works with a small group of students on a particular skill or standard.

Incorporating the use of a station-rotation model is a popular blended-learning 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!
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.
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.

## Our Products

We are committed to making it easier for educators to individualize learning for every student by providing online programs built on pedagogical best practices and valid research.

<table>
<thead>
<tr>
<th>1. Program Needs Analysis</th>
<th>2. Implementation &amp; Onboarding</th>
<th>3. Professional Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review online reading and literacy strategies and best practices</td>
<td>Tailor onboarding process to meet the specific needs of your educators</td>
<td>Offer continuous support focused on preparing and sustaining a successful literacy program</td>
</tr>
</tbody>
</table>

### Products

- **Reading Eggs**: Pre-K–6 foundational literacy and comprehension
- **Exact Path**: K–8 assessment-driven, individualized learning paths
- **Study Island**: K–12 practice and classroom assessment

Contact us today for more information.

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