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The False Divide

Why 'Learn to Read, Read to Learn' Fails Older Readers—and How to Fix It

aerdf | Reading Reimagined

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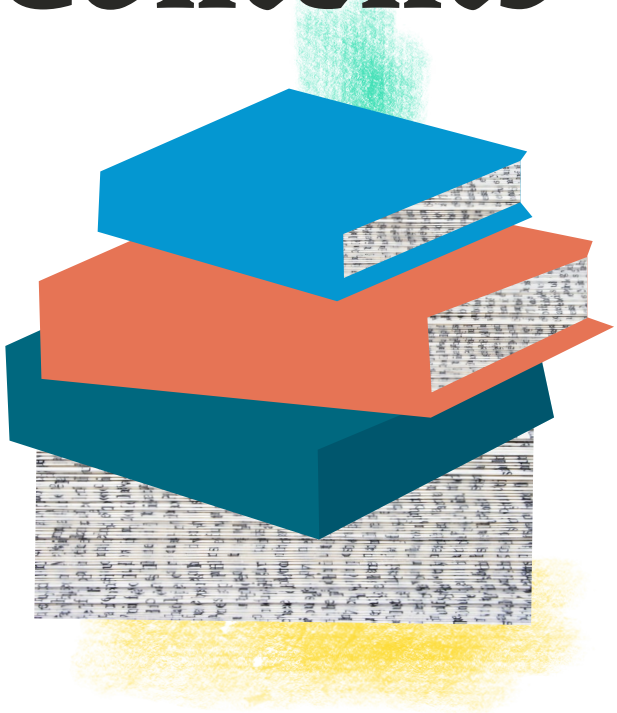


Executive Summary

In the U.S. education system, the approach to reading instruction is based on a stubborn myth: that after third grade, students stop "learning to read" and start "reading to learn." It's true that early literacy is essential and that being on track by grade three is a crucial milestone. But learning to read doesn't end in third grade.

Today, only 30 percent of eighth graders nationwide can read proficiently, according to the National Assessment of Educational Progress (NAEP).[1] Although existing research gives insight into what students need to learn to be proficient readers, it has so far stopped short of showing us exactly which skills older students are missing and how to support them. Reading Reimagined undertook five years of research and development to better understand what's holding readers back, especially in the later grades—and how to help.

HERE'S WHAT WE FOUND:

A gap in advanced decoding skills underpins the literacy crisis for older readers.

Conservative estimates indicate that many older readers struggle to decode grade-level texts:

1 in 3	1 in 4	1 in 6
Fourth graders struggle	Sixth graders struggle	Eighth graders struggle

These students may be able to decode simple words, but they have not yet developed advanced skills to decode the more complex, multisyllabic words that appear in later grades. Without sufficient decoding skills to drive automatic word recognition, reading development stalls—and students cannot comprehend what they read.

We don't explicitly teach older students the advanced reading skills that they need.

Multisyllabic words follow different patterns of spelling and pronunciation. As students encounter more complex texts, they need more advanced literacy skills to read fluently and efficiently. This requires explicit instruction in multisyllabic decoding, morphology (using word parts to infer meaning), sentence structure, vocabulary, and fluency. But most curricula and most classrooms don't cover these topics systematically. We stop teaching foundational literacy skills far too early.

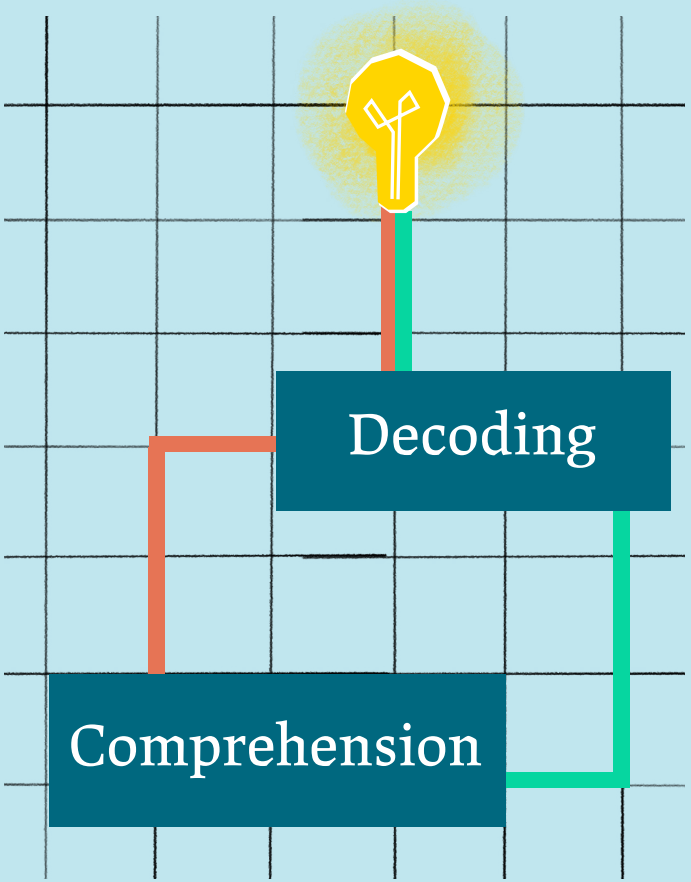
Fixing this requires us to shift our collective mindset about how students learn to read.

It's time to scrap "learn to read, then read to learn." Literacy is not a switch that flips from decoding words in third grade to independently comprehending text in fourth. Decoding and comprehension are like two wires that must continue to develop and remain connected for the lights to go on and stay on. Learning to read requires explicit instruction in foundational literacy skills that advance in complexity from kindergarten through eighth grade.

FOLLOWING FROM THAT MINDSET SHIFT:

- **State policy must advance K–8 foundational literacy standards and require developmentally appropriate assessments.** State education agencies should revise academic standards to include advanced foundational literacy skills in grades 3–8. To identify where students are struggling and how to support them, states should also require the adoption of high-quality, developmentally appropriate literacy screeners for all students in K–8 that assess both early and advanced skills.
- **Districts should adopt technology that can scale advanced literacy instruction.** New technology-enabled tools can deliver individualized instruction on advanced foundational skills in ways previous tools did not, and free teachers up to do what they do best: read and discuss books with students and instill a love for reading.
- **Teachers can implement simple instructional routines that support advanced foundational reading skills.** While waiting for longer-term changes to policy and technology, teachers are not without agency. They can adopt simple instructional strategies that support students' advanced foundational skill-building, and (if applicable) make use of existing modules in their schools' high-quality instructional materials that cover advanced foundational literacy skills.

See the Full Research Findings and Resources to Take Action



Decoding and comprehension are like two wires that must continue to develop and remain connected for the lights to go on and stay on.

INTRODUCTION

They Weren't Reading "The Raven"

Once upon a midnight dreary,
while I pondered, weak and weary,

Over many a quaint and curious
volume of forgotten lore—

While I nodded, nearly napping,
suddenly there came a tapping,

As of some one gently rapping,
rapping at my chamber door.

"'Tis some visitor," I muttered,
"tapping at my chamber door—

Only this and nothing more."

THE RAVEN, EDGAR ALLEN POE

In a middle school classroom in rural northern Louisiana, Rebecca Kockler, then-Assistant Superintendent for Academics for the state, was watching eighth graders discuss "The Raven."

"I got goosebumps," she says. "It was incredible to see our students engaging with such a complex text. They were loving 'The Raven.'"

Louisiana was years into its overhaul of reading instruction, with a focus on improving instruction in the early grades. At first glance, it looked like the effort was paying off.

"We were doing all the things the research told us to do," says Kockler, looking back. "We focused on the science of reading in the early grades, and on building vocabulary and background knowledge in later grades. We adopted strong materials and trained teachers to use them."

But under the surface of the students' enthusiastic discussion about "The Raven," Kockler observed something more worrying: students were listening to their teacher explain the poem. But they could not actually *read* "The Raven" on their own.

Kockler recalls her frustration at the time. "Eighth graders are very curious—they wanted to dive into that text! And the teachers were doing everything right. But the goal is to get kids to a place where they can read well enough that they feel empowered to do that on their *own*. And we hadn't figured out how to do that."

As engaged as the students were, there was something else holding them back as readers.

That "something else," it turns out, is a little—but hugely consequential—expression that has come to guide our entire approach to literacy instruction in this country. If you've worked in or around an elementary school, you've heard it: *"learn to read, then read to learn."*

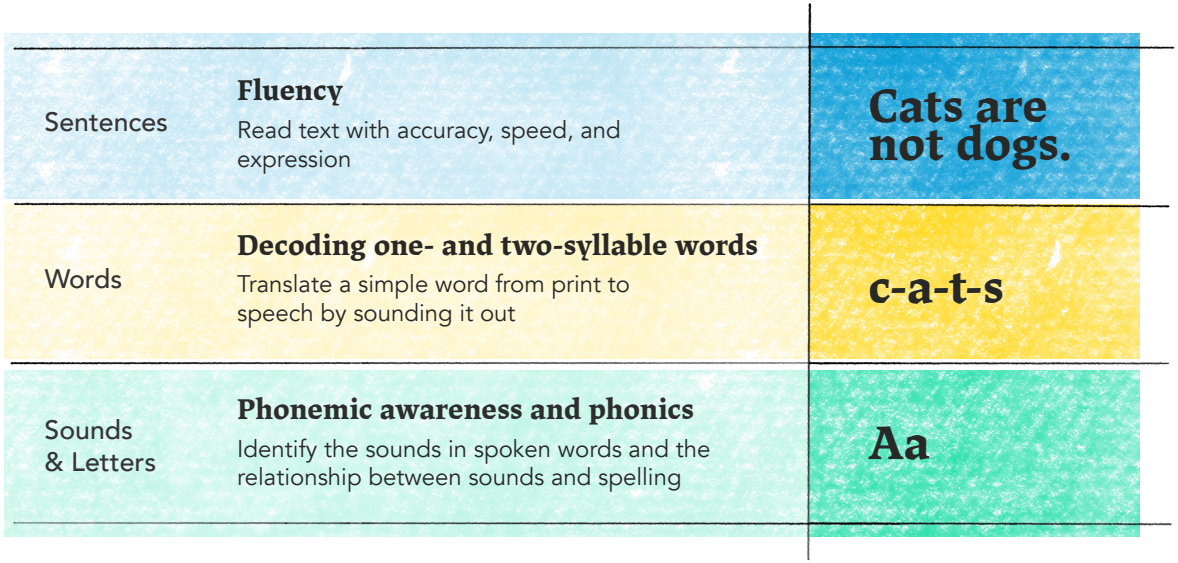
The phrase dramatically oversimplifies the process of learning to read.

The phrase emerged from research led by Jean Chall in the early 1990s, which asserted that "in K–3 children are learning to read, and in 4–12 children are reading to learn."[2] It has proven to be the ultimate "sticky" concept: more than 30 years later, educator training, curriculum development, state literacy standards, and third-grade retention policies all hinge on the notion that literacy development happens in two distinct phases, with a clear delineation separating them.

But the phrase dramatically oversimplifies the process of learning to read. The end goal of literacy instruction, of course, is for students to understand any text they need or want to read in their lives. To achieve that, students must develop automaticity, or the ability to "recognize words quickly enough to construct meaning."[3] Students must be able to process the majority of words in a grade-appropriate text without pausing to explicitly decode each one, leaving cognitive space free to grapple with the meaning of what they're reading.[4]

FIGURE 1

Students Learn Early Foundational Literacy Skills



In our current paradigm, students in early elementary school "learn to read": they spend most of their time on foundational literacy skills, like phonics and decoding simple words. (Figure 1) After that, it's expected that students will "read to learn," so instruction flips to components that hew closely to comprehension, like building vocabulary and background knowledge.

This assumes two things: first, that students can decode well enough to read simple texts fluently and efficiently by the end of third grade; and second, that if they can read fluently and efficiently in third grade, they'll be proficient readers for life. Even as students encounter more complex texts in middle and high school—texts like "The Raven"—this view expects that the early decoding skills they acquired during their "learn to read" years are enough to carry them through.

Unfortunately, that's not what happens.

Why not? How do we know? And what can we do about it? Reading Reimagined set out to answer those questions.

Reading Reimagined

In 2026, Reading Reimagined, a program of the Advanced Education Research and Development Fund (AERDF), completed five years and $40 million of work that aims to dramatically accelerate and sustain reading success for kindergarten through eighth grade students. Our research and development efforts have taken us into thousands of classrooms across the country.

To ensure that our research translates into practical changes that improve outcomes for students, we've developed pilots and studies designed to **define** the problem, **measure** how students are doing, and **intervene** in classrooms to improve those outcomes.

13 Research Partners including universities and assessment providers

1,500 Teachers Surveyed in grades 3–8

85,000 Student Reading Assessments analyzed

85 School District Partners to pilot reading interventions

30,000 Students Engaging with pilot interventions

Learn More About All Our Pilots and Research

The Crisis of Upper Grade Illiteracy

The State of Reading

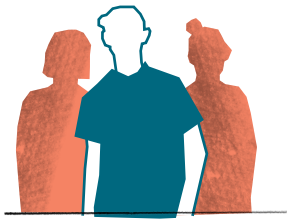
Nationwide, literacy outcomes for students of all ages remain abysmal. Just 31 percent of fourth graders scored proficient or higher in reading on the most recent administration of the National Assessment of Educational Progress (NAEP).[5]

The problem persists into middle and high school. Only 30 percent of eighth graders, like those that Rebecca Kockler observed in Louisiana, scored proficient or higher on NAEP.[6] That leaves more than 2 million students heading into high school without the reading skills they need to access the challenging, curiosity-sparking content most students *want* to tackle. (Figure 2)

The implications of this are devastating, and they compound for students over time. For these young people, learning to read is not merely a matter of scoring well on a test. Students who read below grade level in high school are more likely to fall behind and less likely to graduate on time.[7] They're more likely to spend time on remedial coursework in college, costing them time and money and putting them at greater risk of leaving without a degree.[8] College, career prospects, economic mobility: all of these opportunities hinge on the ability to read and write at least at a functional level.

FIGURE 2

Most Students Cannot Read at Their Grade Level



Only **1 in 3** eighth graders can read the following passage proficiently:

The Great Pacific Garbage Patch is created by plastic waste. Most of the debris consists of "microplastics" —larger chunks of waste that has been reduced to tiny bits of polymer by the combined effects of waves, wind and sun—so it poses an especially dire threat to wildlife.

Sample 8th Grade Reading Passage, 2022 NAEP

In recent years, many states have made a major push to improve reading outcomes by changing how reading is taught in the early elementary grades, typically in kindergarten through second or third grade. Emily Hanford's podcast Sold a Story, released in 2022, played a large role in bringing the "science of reading"—a large body of evidence from cognitive science on how people learn to read—into the public consciousness.

Although literacy rates remain far too low overall, the changes to early literacy instruction have been a step in the right direction. In states that have been investing the longest in the science of reading for the early grades, like Mississippi and Louisiana, fourth grade reading scores have begun to rise.

The problem is, most of the growth in fourth grade proficiency flattens by eighth grade.

In 2013, when Mississippi began to overhaul its early literacy instruction, it ranked 49th in the nation for fourth grade reading scores on the NAEP, with only 21 percent of its fourth graders scoring proficient or above. By 2024, the percentage of fourth graders scoring proficient or higher jumped 11 points, moving the state from 49th to 9th in the nation. But the percentage of eighth graders at proficient or higher grew by just three points in the same time span, and eighth graders' average scaled score has remained the same.[9]

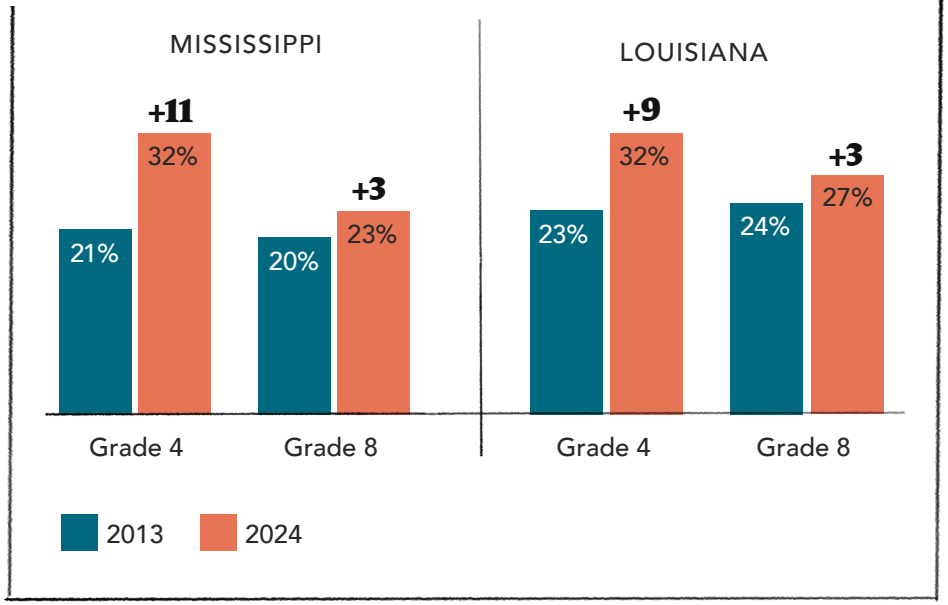
It's the same story in Louisiana. In 2013, it ranked dead last for fourth grade reading scores on NAEP, with only 23 percent of fourth graders scoring proficient or above.[10] Since then, fourth graders made a nine percentage-point jump in reading, moving from 50th to 16th in the nation.[11] But once again, the eighth grade proficiency rate grew by just three percentage points.[12]

These two states are some of our strongest national models of long-term investment in early literacy—and they deserve credit for their progress. Yet a decade later, only about one in four of their eighth graders are proficient readers. (Figure 3)

Let's be very clear: The early years *are* critical for literacy development, and students absolutely need to master important early foundational skills by the end of third grade in order to stay on track over time.

FIGURE 3

Eighth Grade Reading Scores Have Barely Budged



Students Scoring Proficient or Above from 2013–2024, NAEP Reading Assessment

But the scale of the investment in early literacy should not create complacency. "Learn to read, then read to learn" assumes that students will be independent readers by third grade if schools take the right approach (and use the right materials) in the early grades. After that, it's assumed they can break down unfamiliar words and effectively parse sentences and passages of text with increased complexity.[13] The idea that a switch flips after third grade, and that we can stop teaching students the *how* of reading, is false. The stubborn—and unacceptably low—rates of eighth grade reading proficiency attest to it.

As tempting as it is to attribute the upper grades' reading slump to external factors, like the rise in screentime or the COVID pandemic, those explanations don't hold up.

NAEP scores for eighth grade students have been flat for 30 years, well before everyone had cell phones. These scores have been flat in states where fourth grade scores have also remained stagnant (or even declined), and in states where fourth grade scores have improved during the same period. In other words, many older students are not reading grade-level text proficiently, *even if they did* receive effective early literacy instruction.

Older students are missing critical skills they need as readers. While a smaller subset of students are actually missing the earliest foundational skills required to read basic texts (i.e., the skills they should've learned in K–2), many others have mastered those skills, but are still unable to read and comprehend the more complex texts they encounter in the upper grades. Though students in the former group will need additional interventions, *all students* in grades 4–8 need explicit instruction in advanced foundational skills to become durable, proficient readers.

The idea that a switch flips after third grade, and that we can stop teaching students the *how* of reading, is false.

The persistent false belief about students' ability to independently advance and maintain their reading proficiency through the upper grades has come to inform state standards, teacher training, and curriculum development, harming students and hamstringing teachers along the way. This fundamental misunderstanding of how reading proficiency develops has been keeping proficiency out of reach for generations of American students.

To create strong and thriving readers, we must instead adopt a view of learning to read as an ongoing process that develops from kindergarten through eighth grade. Decoding and comprehension are like two wires that must remain connected for the light to go on. Even if that happens in the early grades, in order to ensure that readers' lights *stay* on, we have to teach students the advanced foundational literacy skills they need as they grow.

Meet Calvin

In a fifth grade classroom in Brooklyn, New York, Calvin (not his real name) was frustrated. While his friends were digging into age-appropriate novels, he was still struggling to read picture books. Calvin didn't have a diagnosed reading disability like dyslexia, and he wasn't an English language learner. He had grown up in Brooklyn in a Puerto Rican family, hearing plenty of English in his daily life. Still, by fifth grade, Calvin's progress in reading had sputtered out at around a second grade level.

"He felt embarrassed about it," recalls Calvin's teacher at the time, Ms. C.

When students like Calvin feel embarrassed or frustrated with reading, it dampens their interest and the development of their reading skills.[14] Ms. C. knew that it was critical to break this cycle.

She had been trained early on in systematic, phonics-based literacy instruction because her school participated in New York City's Reading First program under No Child Left Behind. When she taught first grade, she became convinced of the importance of explicit instruction in foundational literacy skills for younger students.

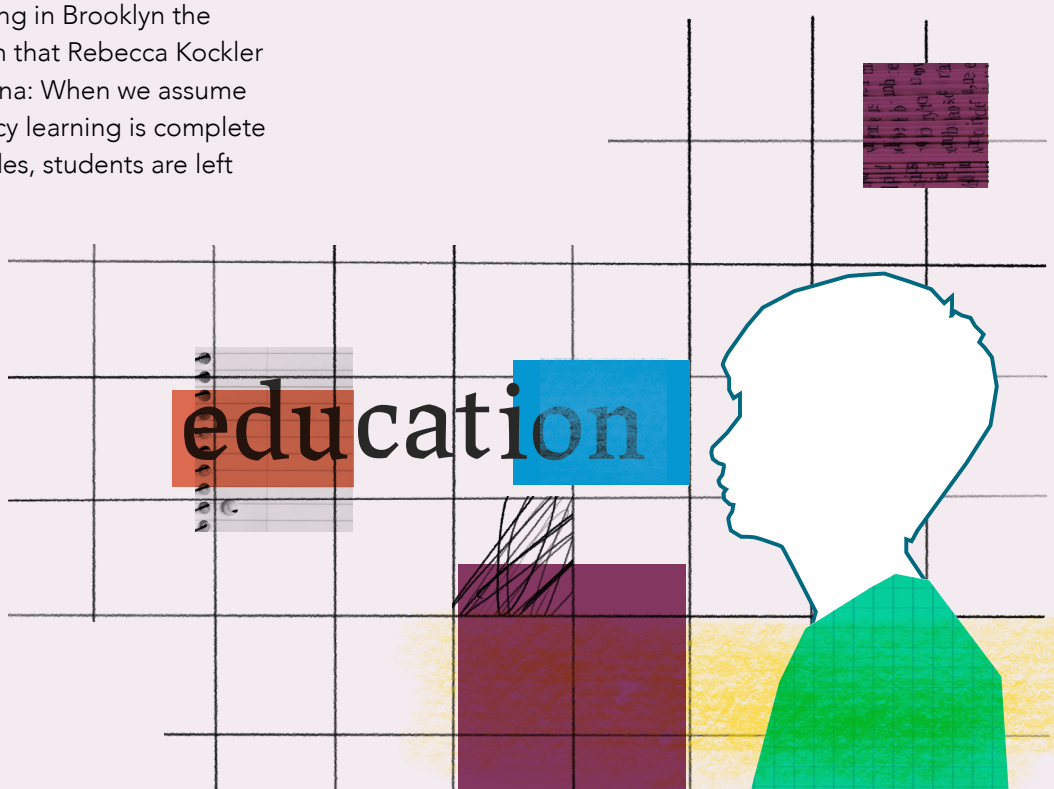
"It was all the things that you need to know in order to be a great reader," she explains of her training. "Letter recognition, letter sounds, decoding. I could see how the puzzle pieces fit together. It made sense for so many kids."

But when she switched to teaching fifth grade, she was shocked by how many of her students couldn't still read independently at that age. Calvin, for example, could decode one-syllable words. But when faced with multisyllabic words, he often guessed based on the first sound.

"If you're reading multiple multisyllabic words incorrectly, you've lost comprehension completely," Ms. C. says. "You no longer know what this text is about."

Ms. C. was observing in Brooklyn the same phenomenon that Rebecca Kockler saw in rural Louisiana: When we assume foundational literacy learning is complete after the early grades, students are left to flounder.

'If you're reading multiple multisyllabic words incorrectly, you've lost comprehension completely,' Ms. C says. 'You no longer know what this text is about.'



Understanding the Role of Decoding

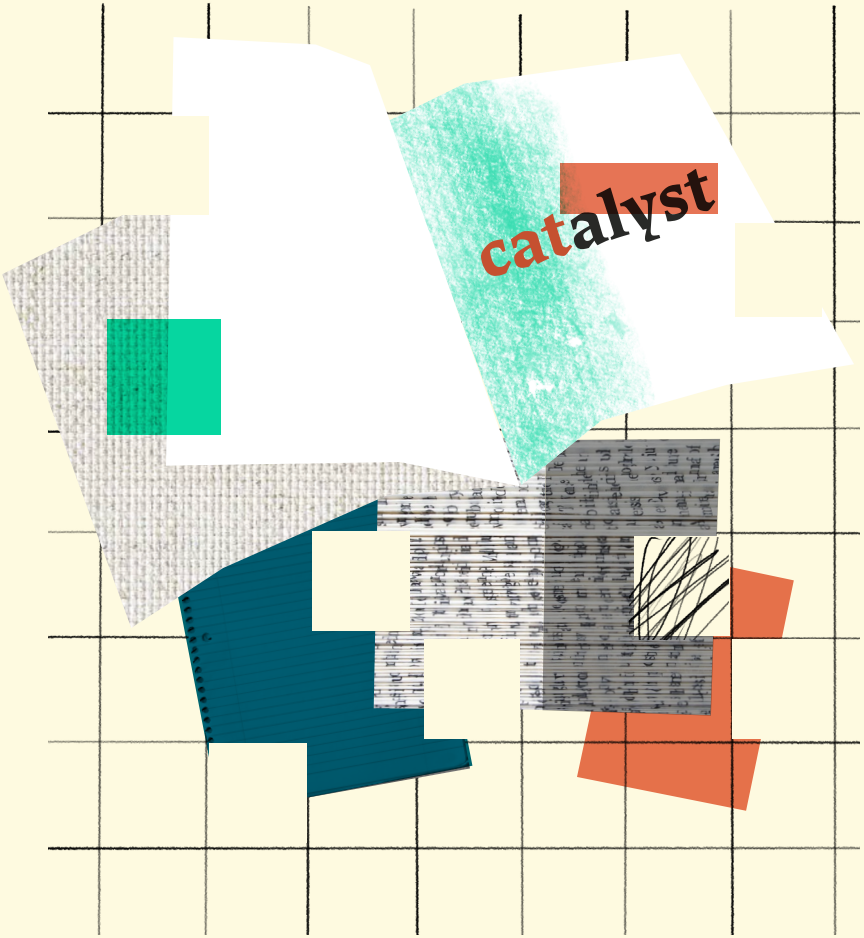
What Are Older Students Missing?

Solving this problem requires us to look closely at what specific foundational literacy skills older students need in order to tackle grade-appropriate texts.

Older readers require an expanded skill set to contend with texts that increase in difficulty as they move up through the grades. Research shows that "foundational literacy skills for adolescents are word reading, word knowledge, sentence structure, and fluency skills that adolescents need to access sentence- and paragraph-level meaning of texts that promote academic and personal growth."[15] All students need opportunities in class to master those foundational skills, while *also* building comprehension and content knowledge, having rich discussions, and reading great books. None of these components are dispensable.

But although the existing research outlines an ideal suite of higher-level literacy skills and knowledge for older readers, there is a lack of readily available data about where most students are falling short—or how to help them. When older students struggle to read a text, how should teachers intervene, and using what strategies?

To answer this question, Reading Reimagined partnered with ETS to conduct new analyses to replicate previous



studies on older students' decoding abilities, and the relationship between decoding and comprehension.[16] The study analyzed student data from the ReadBasix® assessment, which is used by school districts and researchers to measure foundational reading skills in grades 3–12. With data from over 160,000 students in grades 3–12, this represents the most comprehensive study of older students' foundational literacy skills to date.

The study confirms that decoding is a prerequisite for reading comprehension. At a high level, this is intuitive: the more automatically students can decode and recognize the words, the more they can make sense of the text. But it's not a linear process like we might expect.

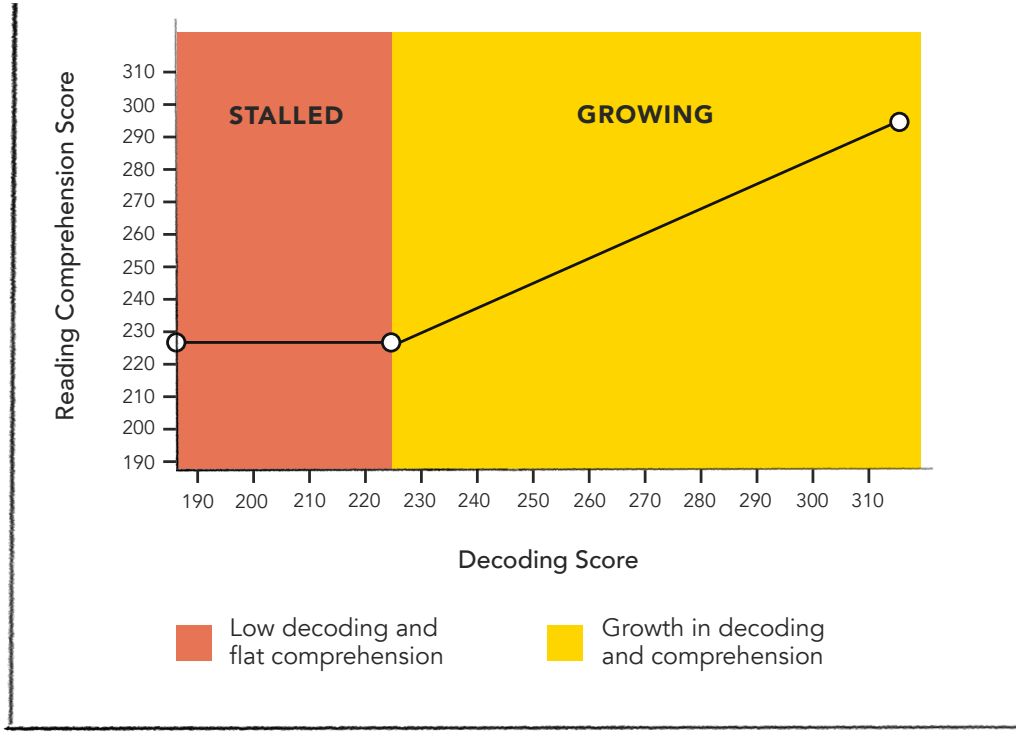
The relationship between decoding ability and reading comprehension is inherently situated in text complexity. This is why decoding instruction *must* take place in the context of grade-appropriate texts. A student who can easily decode and comprehend a second grade text might struggle to decode—or comprehend—a fifth grade text.

There are two distinct phases of the relationship between decoding skill and reading comprehension of any text. Students in the first phase lack the requisite decoding skills to comprehend the grade-level text in question. No amount of instructional support focusing on comprehension alone will help these students improve their ability to independently read and understand that text.

But when students' decoding skills are supported, they eventually reach a tipping point in their word recognition ability and can start to comprehend what they're reading. Once they've mastered the baseline decoding skills for their grade-level text, their comprehension begins to rise. Now decoding and comprehension grow together. (Figure 4)

FIGURE 4

Decoding is a Prerequisite for Comprehension



Student Scores on a ReadBasix® Assessment, Grades 3–12

THERE ARE THREE MAIN IMPLICATIONS OF THIS FOR STUDENTS AND EDUCATORS:

1 Significant numbers of older students struggle to decode grade-level texts.

Conservative estimates indicate that nearly one in three fourth graders (28%) lacks the baseline decoding skills to comprehend grade-level text. This problem persists through middle school: Nearly one in four sixth graders (24%) and one in six eighth graders (16%) still can't decode at grade level, years after they were supposed to have "learned to read."[17] (Figure 5) While they might have been able to proficiently decode grade-level text in earlier grades, these students are unable to decode their current, more complex grade-level text. Their reading development is stalled.

There are likely far more of these students than even these numbers suggest. In a survey conducted by Reading Reimagined in partnership with RAND of 1,400 teachers in grades 3–8, teachers estimated on average that 44 percent of their students "always" or "nearly always" experienced difficulty reading the written content in their instructional materials.[18]

Students who cannot decode automatically struggle to find meaning in texts. Consider, for example, what this reading passage on the eighth grade NAEP assessment looks like for a student who can't decode text at grade-level. (Figure 6) These students will struggle to read the questions in their math workbooks, to make sense of the sources they read in social studies, and the explanations in their science textbooks.

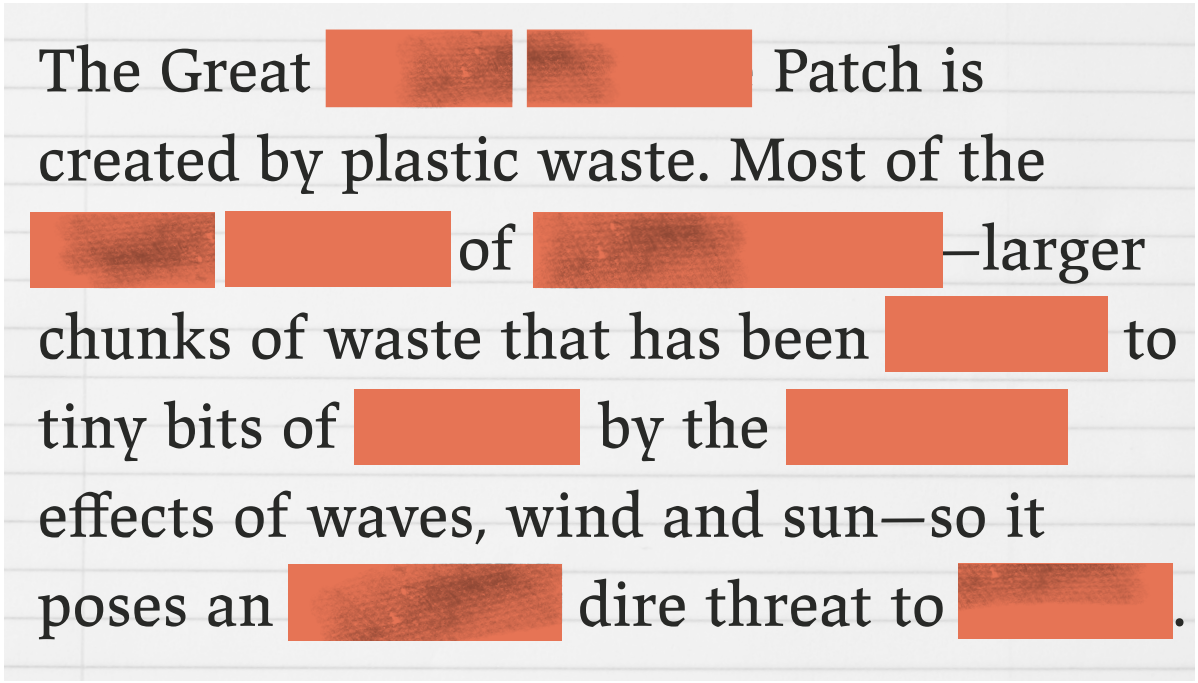
FIGURE 5

Many Older Students Struggle to Decode Grade-Level Text

FIGURE 6

If Students Miss Too Many Words, the Meaning is Lost

To an eighth-grader **who can't decode at grade level**, the text might look like this:



They may be able to read the simple words, but not the more complex ones.

Sample 8th Grade Reading Passage, 2022 NAEP

2 Decoding isn't something you learn once. It gets more complex as words get harder.

The ETS study assessed students on words appropriate for their grade level, from grades 3–12. As the words get more complex, decoding grows more challenging. The skills that allowed these same students to read a second-grade level text are no longer sufficient in later grades, because of the rapidly increasing complexity of the language they encounter.

Researchers estimate that between third and fifth grades, children encounter anywhere from 10,000 to 20,000 new words per year, most of which are multisyllabic.[19] These words often follow different patterns for spelling and pronunciation, and include vocabulary that children rarely encounter in daily life.

FIGURE 7

Early Decoding Skills Aren't Enough for Complex Text

Kids may be able to sound out short words they know:

c-a-t

but struggle to break longer, unfamiliar words down into smaller parts, and use word parts to infer meaning:

education
catalyst
cathartic

To take a simple example, the same three letter set—CAT—appears in the word "EDUCATION," but in this case the pronunciation ("KAYSH") borrows from Latin. (Figure 7) To read the word "EDUCATION," students can't just sound out the letters like they would for "CAT." They also need to know how to break the word down into parts, or morphemes, which are the smallest units of meaning in the English language. "EDUCATION" combines the root word *educare*, from Latin, and the suffix "-ation," which means "the act of." (Figure 8)

As words get more complex—like "CATALYST" or "CATHARTIC"—multisyllabic decoding skills and morphology knowledge help students figure out pronunciation and infer meaning.

Students *must* continue to learn and practice foundational skills in the context of texts that are appropriately challenging for their grade, in order to see their decoding ability—and therefore their comprehension—keep up with the texts they will encounter.

FIGURE 8

Morphology: Using Word Parts to Infer Meaning

3 All students benefit from sustained decoding practice.

Even among the older students who do possess the baseline decoding skills for their grade level, decoding and comprehension grow hand in hand. Again, decoding efficiency—and its role in developing word recognition automaticity—is key here: when a student is able to decode on a basic level, but does so only slowly and painstakingly, the cognitive load dedicated to that process becomes overwhelming, and attention decreases. Comprehension suffers as a result.

This is why even students who test "proficient" in reading in third or fourth grade need ongoing instruction in these skills. More advanced decoding skills enable older students to expend less attention and effort on decoding and more on comprehension. The stronger students' decoding muscles, the more complex thinking they can do. They become stronger readers—essential for their success as they study biology, Shakespeare, calculus, and other complex and unique domains of knowledge.

Taken together, we see how a gap in advanced decoding skills among older students underpins our reading crisis.

Why Can't Older Students Decode?

Simply put—because we aren't teaching them how. Even now, with most states adopting literacy policies that rest upon a robust research base supporting the importance of decoding, it still isn't common practice to talk about the role of foundational literacy skills in reading *beyond third grade*. We stop teaching kids to decode words far too early.

In the upper grades, students are presented with texts and expected to read them, understand them, and learn from them. We expect early decoding skills to allow students to read the more complex words they encounter in these texts. But most students don't make that leap on their own—they must be explicitly taught how to bridge early foundational skills to more advanced ones. This produces the major skill gap we see among so many older students.

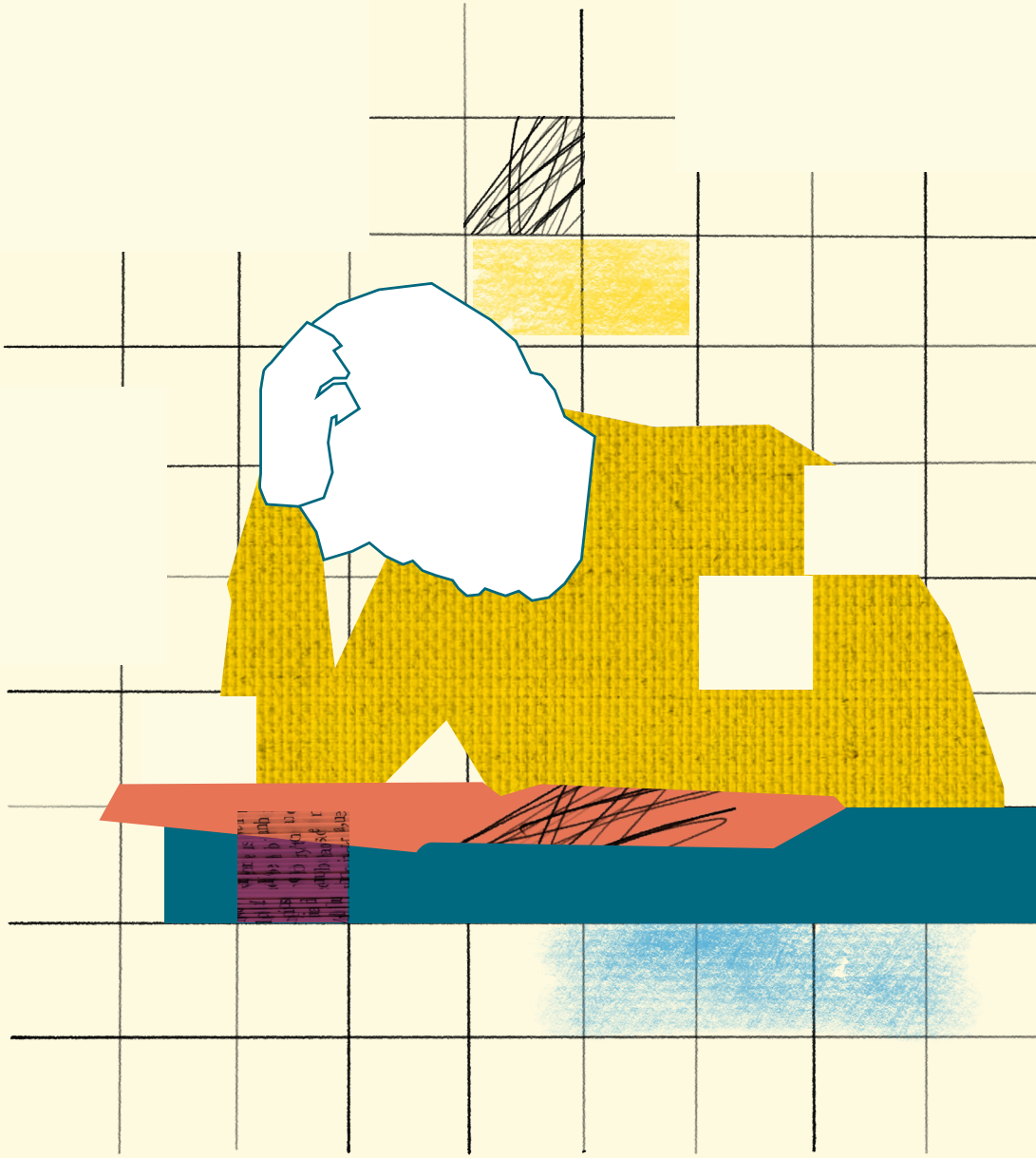
The bottom line: the early decoding skills students build in K–3—*even when they are taught well*—are insufficient as students encounter longer texts with more challenging language and complex sentence structures. When we focus literacy instruction among older students on comprehension alone, as is standard practice today, we are failing to develop a critical muscle for older readers. Without instruction in foundational literacy skills from kindergarten *through* eighth grade, developing early to advanced skills over time, efforts to improve reading instruction and eliminate illiteracy in this country will fall short.

Students must be explicitly taught how to bridge early foundational skills to more advanced ones. This produces the major skill gap we see among so many older students.

Recommendations

We've been debating how to teach reading for decades—and still, despite every investment in new curricula, evidence-based training, and changes to early literacy standards and assessment tools, two-thirds of American middle school students cannot read proficiently. Faced with this crisis of illiteracy, we've made the collective choice to focus on improving instruction in the early grades. By leaving upper grades out, we've left older students to flounder.

This choice means that more students will learn to decode one-syllable words in first grade. But by fifth grade, many will still not have developed their reading skills well enough to enjoy an age-appropriate novel. They won't be able to access a classic poem in eighth grade, or engage with the complex ideas in their high school history or science courses. If not addressed, these limitations will follow them throughout their lives.



What if we made a different choice?

Doing so does not require scrapping the important changes that have already been made in early elementary literacy instruction. We must keep those and build on them, using all the tools at our disposal—via policy, technology, and instruction and assessment—to expand students' learning of advanced foundational reading skills through middle school.

The first step toward solving the illiteracy crisis is changing our collective mindset about how and when students learn to read. It's time to view learning to read as an active, developmental process that demands explicit whole-class instruction in foundational skills that advance in complexity from kindergarten through eighth grade, so that students' decoding and comprehension abilities develop together over time.

Critically, decoding cannot be taught in isolation: Students also need knowledge of morphology, sentence structure, and purposeful fluency-building activities to read accurately.[20, 21] Finally, they have to read rich, engaging, and grade-appropriate texts, supported by adequate background knowledge and academic vocabulary to understand what they read. And they need all this throughout their K–8 years. (Figure 9)

To be clear, this does not mean that the responsibility for teaching basic early literacy should be shunted to the upper grades. In advocating for this mindset shift, we are not offering an excuse for schools to tell parents their struggling early readers "will learn to read eventually." Students who aren't meeting key milestones in grades 2 and 3 should receive interventions to catch them up, and should also be evaluated for learning disabilities. "Learn to read, then read to learn" gets a lot wrong, but it is correct that the early years are critical. They are simply insufficient.

FIGURE 9

Students Need Explicit Instruction Throughout K–8

	Early Foundational Skills	Advanced Foundational Skills
Sentences	**Simple sentence fluency**	**Complex sentence syntax and fluency**
Words	**Decoding one- and two-syllable words**	**Multisyllabic decoding, morphology and vocabulary**
Sounds & Letters	**Phonemic awareness and phonics**	—

WITH THIS NEW COLLECTIVE MINDSET IN PLACE, HERE'S WHAT HAPPENS NEXT:

States: Require K–8 foundational literacy standards and the use of developmentally appropriate assessments.

Even as states have moved to implement new policies reshaping literacy instruction, they have almost entirely left out specific requirements related to advanced foundational literacy skills in the upper grades. In a 50-state analysis of literacy policy, Watershed Advisors found that the vast majority of states have focused their requirements and recommendations on grades K–3, the "learn to read" years.

Across the country, only four states have taken steps to address gaps in reading instruction for older learners—compared to more than 40 that have addressed early literacy instruction. The vast majority of state education agencies are missing opportunities to leverage academic standards and guidance on high-quality instructional materials to promote the teaching and learning of advanced foundational skills.

Some highly rated literacy programs, such as Core Knowledge Language Arts, Arts and Letters, and Expeditionary Learning, *do offer* lesson components that address advanced foundational skills through grades 4, 5, and even 6. But research suggests that teachers may opt out of these lessons, or shortchange them, because they lack the knowledge or training to teach them confidently.[22] And because advanced foundational skills are absent from state academic standards in the upper grades, there is little motivation for instructional leaders to enforce the implementation of these units in already packed school days.

Moreover, most states do not require universal literacy screening for older readers. When they do test for foundational skills, it's often with tools designed for testing early literacy in younger readers—not the multisyllabic decoding and other advanced skills that older students need. As a result, teachers have limited insight into their students' skill gaps: they know if their students can decode simple words like "CAT," but don't know if they struggle with more complex words like "EDUCATION" or "CATHARTIC."

To address the gap in developmentally appropriate assessment data, Reading Reimagined partnered with Stanford University's **Rapid Online Assessment of Reading** (ROAR) team to develop and refine a free, adaptive digital tool that can measure grade-appropriate foundational literacy skills among students in grades K–12 in 30 minutes or less. ROAR can quickly pinpoint where students need more explicit instructional support (e.g. in single word recognition or sentence reading efficiency).

STATE EDUCATION LEADERS SHOULD:

- **Revise academic standards for grades 4–8 to include advanced foundational literacy skills,** including multisyllabic decoding, fluency, and knowledge of morphology, sentence structure, and vocabulary.
- **Require universal, high-quality literacy screeners for all students in grades K–8,** and ensure that districts use developmentally appropriate, validated tools that assess both early and advanced decoding skills, such as ROAR or CAPTI-ReadBasix.
- **Require that high-quality Instructional materials (HQIM) recommended or adopted by districts meet these standards,** or require additional programs to supplement.
- **Exert pressure—through state guidance and rubrics on HQIM—on educational publishers** to address gaps in advanced foundational skills in their materials.

See All Actions for State Policymakers

Addressing Older Readers Through Policy in Minnesota

To their credit, Minnesota includes explicit standards dedicated to advanced foundational literacy skills through sixth grade. Sixth graders in Minnesota must be able to "demonstrate knowledge of oral language, phonological and phonemic awareness, phonics and morphology to read accurately and fluently." In order to demonstrate these skills, sixth graders should "know and apply grade-level phonics and word analysis skills in decoding words: Use knowledge of letter-sound correspondences, syllabication patterns and word origin (Greek) to decode and comprehend unfamiliar multisyllabic words in and out of context."

These standards, written in 2020, will be fully implemented for the first time in the 2025–26 school year. And their implementation is bolstered by the state's rigorous screening policy. The state's READ Act, passed in 2023, requires universal screening three times per year for grades K–3, and it also mandates continued screening for grades 4–12 for "at-risk" students—a category that includes any student who is not reading at grade-level. In practice, this change means that teachers in the upper grades—all the way through high school—will now have access to data that tells them exactly which skills their struggling readers are missing.

Crucially, Minnesota lawmakers have also weighed in on what screeners districts should use, recommending the CAPTI-ReadBasix screener for these assessments. Minnesota could go even further by including a standard on advanced foundational literacy skills in every grade through eighth and mandating universal screening for all older students, rather than just those who are behind. But we believe the policy, as it stands, will enable schools and teachers to identify the root causes of reading difficulties in a majority of their older readers, and give teachers critical information they need to support students.

Districts: Adopt technology that can scale advanced literacy instruction.

Everyone knows older students are struggling with reading, but their teachers have very little clarity about *where* the particular problems lie. In part, this is a measurement problem: most schools don't assess older students on advanced foundational reading skills.

Even when teachers do have insight into which specific skills their students are missing, it's impossible to provide the individualized word work all students need, given the range of needs in any given classroom, teachers' lack of training in advanced foundational skills, and other demands on teachers' time. But solving for this entirely at the individual teacher level would require re-training all teachers in grades 4-8 in advanced foundational literacy instruction, an undertaking that is both unrealistic and unlikely to succeed.

Instead of relying on teachers to shoulder the full burden of this instructional shift, technology can play a critical role in implementing a K–8 literacy framework at scale. With precise assessment data, high-quality, tech-enabled tools can deliver the foundational literacy practice that older readers need, both as a component of core instruction and intervention.

In core instruction, this might look like all students practicing the advanced skills that support the current or upcoming lesson with a complex text (such as grade-level morphology, vocabulary, or fluency practice). In intervention, students who need additional support would practice the unique foundational skills identified by their screening assessment data.

Since their teacher won't need to invest a huge amount of time teaching advanced foundational literacy skills at precisely the level needed by each child, they will have the time and capacity to focus on what teachers do best and where their work is most vital: in-person dialogue with students that builds their comprehension and encourages deep engagement with texts.

Instead of relying on teachers to shoulder the full burden of this instructional shift, technology can play a critical role in implementing a K–8 literacy framework at scale.

DISTRICT AND SCHOOL LEADERS SHOULD:

- **Adopt new digital assessment tools specifically designed to measure older students' foundational reading and writing skills.** Tools like ROAR and CAPTI-ReadBasix already exist, and they work—they just aren't in use in most classrooms right now.
- **Integrate high-quality technology-enabled tools for individualized word work.** Digital tools have the ability to deliver individualized instruction in advanced foundational literacy skills, based on students' assessment results. Our research shows that technology-enabled tools—*when* these tools are selected carefully for efficacy and implemented appropriately—are an effective and efficient way to meet the diverse needs of learners.
- **Bring together technology with teacher-led activities to deliver coherent instruction.** Technology should be used to teach the advanced foundational reading skills that teachers in grades 3–8 are not trained for, allowing teachers to focus on background knowledge, academic vocabulary, reading fluency, and comprehension. Incorporating technology into foundational literacy instruction will also help schools balance the scheduling demands of all these components by allowing students to practice word work and targeted skill-building efficiently in smaller blocks of time.

See All Actions for District Leaders

A Developmentally Appropriate Assessment for Foundational Literacy Skills

In a pilot study with the Achievement Network, ROAR was implemented in 11 schools in an urban district, capturing data from more than 3,500 students in grades 6–12. The initial assessment found that 59 percent of the district's sixth graders tested below a third-grade level for sentence-level reading efficiency.

Teachers and school leaders in the ROAR pilot are already using the data to adapt their instructional practices. At the classroom level, teachers have begun implementing instructional routines alongside their core curriculum to address their students' highest need according to the assessment data (for example, morphology or fluency).

At the district level, a working group audited the use of literacy assessments in grades 6–12, and found that students were wasting valuable instructional time to over-testing, and that teachers didn't understand how to use the data to adapt instruction. By the end of the year, the working group had omitted assessments that were unnecessary or duplicative and created a system for moving forward. The district plans to administer ROAR again to understand the effectiveness of the changes they've made so far.

Using Technology to Teach Foundational Literacy Skills

Using what we've learned through five years of research and pilot programs, Reading Reimagined developed Magpie Literacy, a suite of adaptive digital tools designed to support literacy learning in grades K–2 (Magpie Foundations) *and* grades 3–8.

As of spring 2026, the K–2 tool is already in use in classrooms across the country, and initial evaluations show statistically significant student learning growth, particularly for students who began the year scoring in the bottom 25th percentile. Magpie's tool for grades 3–8 is still in development, being co-designed in collaboration with teachers and students who are part of a pilot program.

Magpie offers students a coherent literacy experience from the initial assessment through to skill-building practice. This is a significant change from a student's current experience of literacy instruction. Right now, most students are exposed to content from a wide range of sources: their teacher uses one curriculum; they're accessing supplemental digital resources during and outside school; they might be receiving an intervention or tutoring using a different curriculum entirely.

When Magpie is fully operational in grades 3–8 by fall 2027, a student will be assessed using ROAR, then receive daily, adaptive digital instruction based on those results. The tool can be integrated with a classroom's primary curriculum, so it will prepare students for the texts they'll encounter there. Teachers and families will receive regular updates on a student's progress, so they too can understand what their child is working on and where they still need practice.

Ensuring Instructional Coherence in Intervention

Currently, literacy interventions tend to focus on remediating students' early decoding skills, rather than building up their more advanced ones. Too often, struggling readers review skills taught in the early grades, like sounding out one- and two-syllable words, regardless of what they already know. This isolated skill practice may not connect to what is being covered in class, making it hard for students to connect the dots.

The goal of intervention is to prepare every student to independently access the grade-level book in front of them. Rather than remediating every skill, intervention time should be used to identify and teach the specific combination of skills that will help students access the upcoming lesson. Foundational literacy skills are mastered in application. To that end, students should practice their priority literacy skills—both early and advanced—in the context of the vocabulary and books they're reading in class.

Teachers: Use simple instructional routines that support advanced reading skills.

Even when teachers at upper grade levels see their students struggling with reading, they often lack both the training and the resources to give these students what they need. Two-thirds of the teachers in grades 3–8 surveyed by RAND, in partnership with Reading Reimagined, said they need resources to identify struggling readers and support their development. And nearly half said that their knowledge of foundational literacy instruction comes from their experience in the classroom, not from any formal training.[23] Teachers of older students are missing important knowledge of how to teach more complex skills. These advanced skills are not merely an extension of the earlier ones; teaching them requires different techniques and more specialized knowledge of linguistics, without which teachers won't be able to confidently support their students' learning.

As we've already noted, re-training all teachers in grades 4–8 is an unrealistic solution. And changing policy and adopting new technologies will inevitably take time. But in the meantime, teachers are not without agency.

TEACHERS CAN:

- **Adopt simple instructional strategies that don't require lots of additional training and don't take a ton of time.** Strategies like the NWEA Fluency Protocol for Upper Grades and Read STOP Write, for example, are easily adopted with very little additional preparation or training, and can support students' advanced foundational skill-building in the upper grades.
- **Make consistent use of existing units on advanced foundational skills where they are available,** including syllabication, spelling, fluency, morphology and vocabulary acquisition. These lessons may already be available within their school's adopted high-quality instructional materials.
- **Approach technology as an opportunity.** Implemented effectively, technology-enabled word work tools should allow teachers to focus their time on the aspects of instruction where in-person discussion is irreplaceable—instilling their students with a love for books, and, indeed, *reading to learn*.

See All Actions for Educators

Piloting Protocols to Build Foundational Skills Among Older Students

Since 2022, Reading Reimagined has partnered with school districts and research organizations across the country to pilot and study a slate of new tools designed to support older students' literacy learning. Research studies on these pilot programs offer some early insights into their potential use.

NWEA FLUENCY PROTOCOL FOR UPPER GRADES

The Northwest Evaluation Association (NWEA) conducted a research study on the use of a new fluency protocol in three grade 6 classrooms in a large urban school district. Teachers can integrate the protocol into their classrooms with relatively little training (in this case, two hours) or preparation, making it an appealing option as "low-hanging fruit" for supporting older students' literacy.

The protocol is made up of five lessons of around 20 minutes each, each with embedded intervention strategies. Each lesson includes a structured set of activities focused on a single common text, beginning from a teacher read-aloud and progressing through echo reading (students reading each sentence aloud after their teacher), choral reading (students reading out loud together), and independent reading in pairs. Students also spend time on word work within each lesson, identifying challenging words, decoding, and analyzing sentences as a group.

In an initial pilot, the fluency protocol was a particularly effective intervention for students who were below the 50th percentile in reading. These students, most of whom were English learners, showed statistically significant gains in reading, pointing to the benefit of repeated read-alouds and common fluency practices for emergent English speakers.

Learn More

READ STOP WRITE

Read STOP Write is designed to bolster older students' literacy skills through a set of lesson plans (24 weeks of lessons for grades 4–5; 12 weeks for grades 6–9) that bring together instruction in foundational literacy skills and comprehension using challenging social studies and science texts. In each Read STOP Write lesson, teachers and students follow six common steps: reading an informational text twice, summarizing the text, re-reading the text, organizing ideas, making a plan to write about the text, and writing about the text.

A small study by the State University of New York at Buffalo has looked at the use of a revised version of Read STOP Write in 12 fourth and fifth grade classrooms in an urban school district. Results were promising: students experienced significant gains in word reading and comprehension. Read STOP Write may be an effective tool for whole-class instruction at the fourth and fifth grade levels, and for either whole-class instruction or small-group intervention in sixth grade and above, as it fills a gap in foundational literacy instruction in many literacy curricula for this age group.

Learn More

BIG WORDS

BIG Words is designed to support older students' ability to decode multisyllabic words, spell words, write sentences, and read fluently. In a pilot study conducted by the University of Tennessee at Knoxville, third, fourth and fifth grade students in a rural school district received a 45-min daily intervention. This included teacher-modeled decoding practices, guided practice in reading fluency, and independent practice across word reading and spelling. Students showed improvements in word recognition, vocabulary, and morphology.

While these programs are still in development and demand further study, we believe they represent promising opportunities to improve literacy outcomes among older readers. Educational leaders who are motivated to address the unique literacy needs of their older students should consider introducing these programs as a step toward integrating advanced foundational literacy skills, *without* placing a significant burden on teachers.

Learn More

The Possible Future

The progress we've seen in states like Louisiana and Mississippi proves that when we follow the research, change at scale *can happen*. But this progress has also had the inadvertent effect of creating complacency in the field about how long it takes to develop adult-level reading proficiency, and what instructional supports students need to get there. It has obscured the reality that we are still not serving the majority of our students well.

We have an opportunity right now to build on the momentum around literacy and evolve our approach so we can support the 70 percent of eighth graders who are not currently reading proficiently. All students deserve to experience the full benefit of a comprehensive, continuous approach to evidence-based reading instruction. Otherwise, we risk putting a huge amount of time, effort, and money into reading instruction—only to find that the benefits to students wane after a few short years.

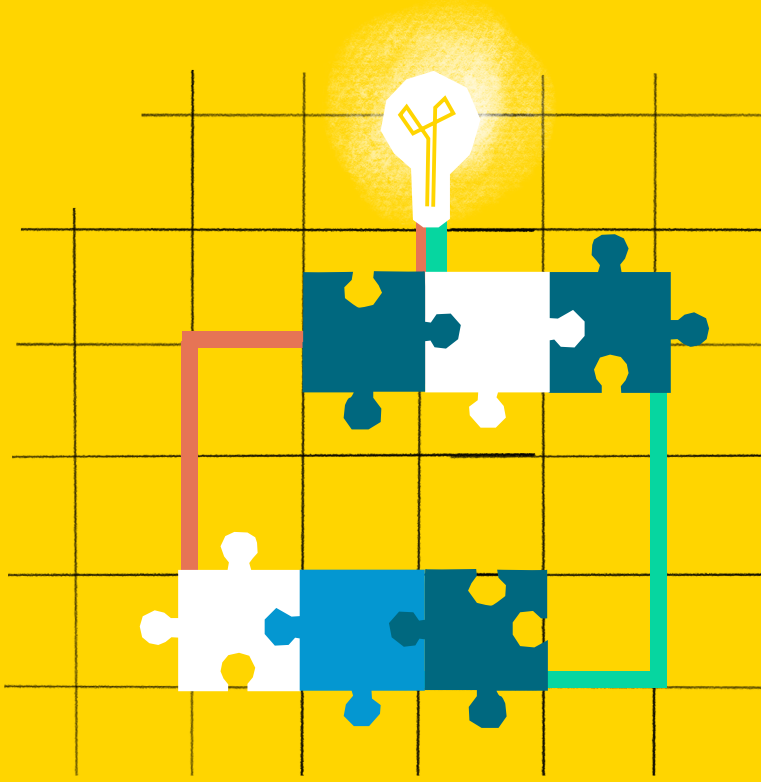
That's why, knowing what she knows now, Rebecca Kockler would approach literacy policy in Louisiana differently.

"There is bridging that needs to happen to take kids from simple decoding to comprehending complex texts—to help them enter into robust, enriching text in a meaningful way," she says.

That bridge is still missing in most places, and fixing it will require all of us—from policymakers to researchers and journalists, instructional leaders and educators in the classroom—to commit to changing both our mindsets and our practices.

In Brooklyn, Calvin needed the bridge, too. He didn't finish fifth grade reading at a fifth-grade level. But he was no longer reading like a second grader, either. With Ms. C.'s support, Calvin learned to decode more complex, multisyllabic words, and words that didn't follow the same patterns as the simple language he encountered in kindergarten and first grade. He built his vocabulary, and he built his confidence, too. His teacher explains that this explicit instruction was critical for Calvin's development.

"We can't expect kids to learn on their own," says Ms. C. "We have to teach them the puzzles and secrets of English if they're going to be able to read it."



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