

Science of Reading

EDITOR'S NOTE

Teaching children to read has evolved into new complications with distance learning. In this Spotlight, review what the science says and rediscover the struggles commonly seen; gain insight on how things may change for educators; and evaluate methods being applied.

Comprehension for Early Readers	2
Schools Already Struggled to Teach Reading Right. Now They Have to Do It Online	4
How to Teach Reading With a Digital Mindset: Researcher Nell Duke's Advice	7
Is This the End of 'Three Cueing'?	9

Will the Science of Reading Catch On in Teacher Prep?	2
OPINION	
Explicit Phonics Instruction: It's Not Just for Students With Dyslexia	5
An Open Letter to the NAEP Governing Board	6



Published on December 3. 2019

More Than Phonics: How to Boost Comprehension for Early Readers

By Sarah Schwartz

W

hat do you do when hear a word you don't know? In Ashley Palmer's kindergarten class, you stop. And you talk about it.

Palmer, a teacher at Matthews Elementary School in Missouri's New Madrid district, was telling a story about a family of toy lions during one morning lesson when she got to the word "lass."

"That's one of our vocabulary words," she told the group of children sitting cross-legged on the rug. Then she led the students in clapping out its one syllable, then segmenting the sounds: $\frac{1}{\sqrt{a}}$.

"It's another word for 'girl," Palmer said. "Sometimes when I line you up for bathroom break, in-stead of saying girls, or ladies, I can say, 'If you are a—"

"Lass!" the students shouted out, as some sat up on their knees. "'If you are a—lass—you can line up," Palmer finished.

The whole process is deceptively simple it took less than 60 seconds—but this kind of embedded vocabulary instruction is a key piece of Matthews' overhauled early reading program. Just five years ago, only about 14 percent of the school scored proficient on the state's annual assessment. The numbers have grown steadily to the point where in 2019, 80 percent of the students met the standard. In 3rd grade, the numbers reached 95 percent.

In the literacy world, there's a perennial concern that focusing on foundational skills will come at the expense of giving kids opportunities to practice language and enjoy stories. But researchers and educators say that it's not only possible to teach useful vocabulary and meaningful content knowledge to young children—it's necessary.

A body of research has shown that once students can decode, their reading comprehension is large-ly dependent on their language comprehension—or the background and vocabulary knowledge that they bring to a text, and their ability to follow the structure of a story and think about it analytically.

Before students can glean this kind of information from print, experts say, they can do it through oral language: by having conversations about the meaning of words, telling stories, and reading books aloud.

At Matthews, an explicit, systematic approach to phonics instruction has helped drive

Ashley Palmer, a kindergarten teacher in Matthews, Mo., works with students on letter names using flashcards.

the big jumps in student achievement—but it's only one part of the equation, said Angie Hanlin, the school's principal. The school took on a complete restructuring of its reading program, which in-cluded changing the way teachers planned and taught vocabulary and reading comprehension.

"Putting a phonics patch on a reading program or on a school is not going to teach all students to read," Hanlin said. "It is not going to fix it, and it's not going to drive up the data."

This is the premise behind the Simple View of Reading, a framework for comprehension first pro-posed by researchers Philip B. Gough and William E. Tunmer in 1986, and confirmed by later stud-ies.

The simple view holds that reading comprehension is the product of decoding ability and language comprehension. Kids who can't decode words won't be able to read, no matter how much vocabu-lary they know, or how much they know about the world. But the opposite is also true: If they don't have this background knowledge, children won't be able to understand the words that they can read off the page.

Engaging With Rich Content

"Decoding has a really outsized role on reading comprehension in the early grades," said Gina Cervetti, an associate professor of education at the University of Michigan, who studies the role of content-area knowledge in literacy. "But as students consolidate their decoding, very quickly that equation shifts."

As students progress into 2nd, 3rd, and 4th grades, texts become more challenging—there are big-ger words, harder concepts, and more assumptions about what students already know about the world.

Kids need to start engaging with rich content early on, so that once they are expected to read it on the page, they understand what's going on. If they haven't developed that foundation, it's hard to catch up quickly, said Cervetti.

"To learn words well, you need to encounter them again and again," said Margaret McKeown, a senior scientist at the Learning Research and Development Center at the University of Pittsburgh, and an expert in vocabulary instruction. As very young children learn words, they start to form connections in the brain—links that join synonyms together, or relate words that are used in similar situations.

PROGRAMS DON'T TEACH STUDENTS,

TEACHERS DO

Teachers are the most important factor in student success.

Teachers are the driving force and change agents for children, and a teacher's understanding of how children learn to read—and what happens when they don't respond to instruction—is the key to students' growth.

When you know better, you do better.

CAROL TOLMAN, ED.D.

Literacy Expert and Co-author of LETRS*
Literacy Professional Development





Literacy Professional Development

LITERACY STARTS WITH A TEACHER

Learn more: voyagersopris.com/letrs







This gives bigger, harder words a place to land when students learn them, McKeown said. "The concepts aren't new," she said. "They're just more sophisticated or refined ways to describe similar things."

At Matthews Elementary, teachers meet once a week to go through their foundational skills lessons and read-aloud books. The curriculum they use identifies vocabulary words that can be embedded in lessons. But the teachers also look for words in the text that their students specifically might struggle with.

In that week's kindergarten class, one of those words was "living room." Palmer had introduced the word earlier that week—a lot of her students didn't have a space in their homes that they called by that name. In this day's lesson, she asked students to recall it, asking questions: What kind of room has a couch? A chair?

Matthews is in a small, rural county, where the majority of students receive free and reduced-price lunch. Hanlin said that a lot of books, even for young readers, assume life experience her students don't have. So teachers build on the knowledge that students do have. For example, Hanlin said, students might not know the word "cathedral." But they do know the word "church."

It's important to do this kind of planning ahead, said Tanya Wright, an associate professor of educa-tion at Michigan State University, who studies oral language, vocabulary, and knowledge develop-ment.

Before a teacher reads a text to or with students, she needs to read it herself, Wright said. "You're going to know where you need to stop, where you need to explain." Ahead of time, teachers should plan child-friendly definitions, or figure out how they might use props or movements to demonstrate the word.

But this kind of planned vocabulary instruction may not be happening in most schools. In a study published in 2014, Wright and her colleagues observed the way teachers discussed vocabulary in 55 kindergarten classrooms. They found a general lack of planned and purposeful instruction—most teachers weren't talking about a word more than once or selecting words in any systematic way.

There are ways to draw out more conversation about vocabulary words, McKeown said. One strategy comes from an unlikely place: improv comedy groups.

In improv, comedians are taught to say, "Yes, and ... " to build off of the scenario that their fellow performers create. The same framework can help kids build related vocabulary. Take the word "cautious," McKeown said.

A student asked to use the word might say



Ava Newton, a student in Ashley Palmer's kindergarten class, points at the projector screen during a reading comprehension lesson.

that he had to be cautious, because someone was riding a bike fast near him. The teacher can agree, and then expand on that same idea: "You had to be careful because it might be dangerous if someone hit you with their bike."

"You're always adding more words that are associated with the [main] word, demonstrating a greater context for words," McKeown said.

In a read-aloud that afternoon, Palmer's kindergarten class heard another story about a lion—this time, one that had escaped from the zoo and befriended a little girl. As the lion curled up for a nap in the girl's house, Palmer paused on the words "lions sleep a lot." She turned to give the students on the rug a puzzled look.

"Is that true?" she asked. She referenced a nonfiction book the class had read the day before, about lions in the wild. "They like to sleep and lie around 20 out of the 24 hours!" Palmer said.

As she continued to read, she made more links back to the nonfiction text, explaining as she went what was real and what was makebelieve, adding in extra details that the nonfiction book hadn't covered. She made these implicit connections explicit for her students.

Building Knowledge

Still other schools are turning to curricula that are purposefully structured to build knowledge—diving deeply into specific content areas, even in the very early grades.

These curricula are based on the theory that all students need a similar foundation in core domains—like literature, the arts, science, social studies, and history—so that they have the knowledge base to support comprehension.

Educational theorist E.D. Hirsch is widely credited as the originator of this idea. His 1987 book, *Cultural Literacy: What Every American Needs to Know*, argued that schools need to expose students to the body of knowledge that authors and speakers will expect them to have. This idea has seen a resurgence in popular conversation more recently through author Natalie Wexler's 2019 book, *The Knowledge Gap: The Hidden Cause of America's Broken Education System—and How to Fix It*, which criticizes U.S. schools for prioritizing skills-based instruction over the teaching of content.

The notion that background knowledge informs understanding isn't very controversial. But about exactly what knowledge schools should prioritize definitely are. Many teachers reject the idea of a shared literary canon, for example, arguing that it upholds a Eurocentric approach to American education that privileges the knowledge and histories of white Westerners at the expense of people of color.

But Jared Myracle, the chief academic officer in Jackson-Madison County schools in Tennessee, sees providing this kind of background knowledge as an equity issue.

Students from low-income families often don't come into school with the same depth of academic language that students from higherincome families do, limiting their ability to make meaning from what they read, he said. In Jackson-Madison county, the data bore out this divide: Schools where the vast majority of students received free and reduced-price lunch were trailing the district when Myracle started there in 2017.

Now, students spend an hour every day doing basic skills instruction—like naming and writing letters, practicing phonological awareness, and learning phonics—and an hour on what's called "lis-tening and learning." These lessons teach topics through conversation and read-alouds—in kindergarten, they learn about plants, 1st grade is early civilizations, and 2nd graders cover systems of the human body.

Kristin Peachey, an instructional coach at Pope Elementary School in the district, said that talking about complex topics lets students engage at a higher level than they would through text at this early age.

A coherent unit of study also provides opportunities for teaching comprehension, said Cervetti, the University of Michigan professor. "You can't really reason about things in very sophisticated ways unless you know something about them," she said.

Students should have the opportunity to discuss questions that are open-ended, without a single answer, during read-alouds, said Wright. "If we're telling kids to think quietly and only be listeners and not participants in the read-aloud, then that's not optimal for their learning."

At Pope Elementary, teachers plan and talk through the questions they'll ask during read-alouds, said Peachey. Take a recent 2nd grade lesson about Greek mythology, she said. After teachers read the story "Atalanta and the Golden Apples," students were asked to reflect

on characters' motivations: Why would Atalanta only marry someone who could beat her in a footrace?

Imparting a deep understanding of subject matter, and teaching children to think analytically—that takes time, said Myracle. "It's pretty easy to see gains on the foundational skills side, once you implement a systematic [phonics] program," he said. Knowledge-building is a longer process.

Myracle believes that the payoff will be worth it. But he worries that some districts will try on a content knowledge focus like a passing fad, dismissing it before they have the opportunity to see any effects.

"My biggest fear is that districts that are starting to do some of this work to build knowledge in early grades, that they won't stick with it," Myracle said. "The gains are going to be longer in coming."

Published on 9/29/2020

Schools Already Struggled to Teach Reading Right. Now They Have to Do It Online

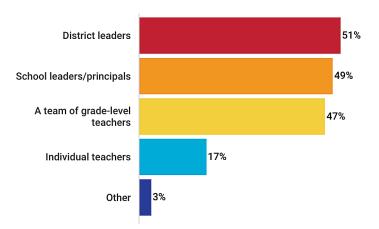
By Benjamin Herold

eady or not, the nation's elementary school educators are staring down a daunting new challenge: teach hundreds of thousands of young children to read, without being able to interact with them in person, using instead digital tools and videoconferencing platforms in sweeping new ways that are mostly untested.

Even before public schools shut their physical doors to help slow the spread of the coronavirus, many educators were struggling with this most fundamental of tasks. Especially concerning was schools' scattershot, often-unscientific approach to teaching the basic building blocks of reading, such as understanding how sounds are put together to form words. That's likely one reason why just 35 percent of American 4th graders are proficient readers, according to the most recent of the National Assessment of Educational Progress.

Now, with thousands of schools reopening virtually or using a mix of online and inperson instruction, even those teachers trying the kind of phonics instruction supported by cognitive science will be forced to do so re-

Who selects the primary digital/online reading programs and materials that teachers in your district or school use to teach students how to read during remote learning? Select all that apply.



*Results show responses from teachers, principals and district leaders who reported involvement with early reading instruction.

SOURCE: EdWeek Research Center

motely, in online environments they are still learning to navigate. Many more educators appear likely to try a hodgepodge of early-literacy software programs and digital apps—many of which have shown no evidence of effectiveness, and almost all of which are best suited as supplements to regular classroom teaching—as primary instructional tools.

Add it all up, and America's K-12 system is about to embark on a massive experiment with incredibly high stakes for an entire generation of young children.

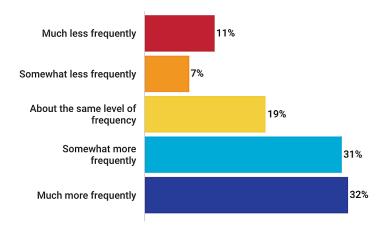
The best case, according to experts in early literacy and educational technology consulted by Education Week, is that schools use the coming year to actually improve how they teach reading, responding to emergency conditions by finally discarding practices and tools that don't work. In this scenario, technology would actively help teachers provide a strong foundation in phonics and other foundational skills, while giving students ample opportunities to apply what they've learned and build vocabulary, comprehension, and fluency while developing a lifelong love of reading.

The more realistic hope is that schools manage to tread water, making do under difficult conditions to ensure young readers don't completely miss out on a crucial window for building basic skills.

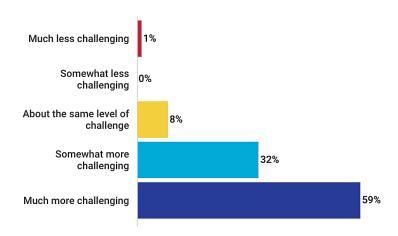
The fear, though, is that such a catastrophe is already underway, especially for those students who are living in poverty, have special needs, or are still learning English. Huge gaps in access to technology remain. Coronavirus-related deaths, sickness, and economic hardship are causing mounting trauma, especially in the Black, brown, and Indigenous communities bearing the brunt of the pandemic. And many schools, already resistant to change, were beset this summer by budget cuts and constantly shifting guidance from state and federal officials, leading them to provide early-elementary teachers with little or no training around new forms of remote literacy instruction.

"We're in totally uncharted space," said Kyle Snow, a senior research associate for RMC Research Corporation and formerly a senior scholar at the National Association for the Education of Young Children. "Figuring out how to consistently reach kids with substantive instruction targeted at foundational skills is the critical challenge. But even if you assume that we had figured out how to do that—which we had not—we now have to dramatically shift what we're doing because of the pandemic."

Compared to prior to the pandemic, how frequently have you, or the teachers you work with, been using digital/online reading programs to teach students to read?



Compared to teaching students to read in person with print materials, teaching students to read with remote instruction and digital materials is:



*Results show responses from teachers, principals and district leaders who reported involvement with early reading instruction.

SOURCE: EdWeek Research Center

EdWeek'
Research Center



Part of learning to read is going through struggle. But a lot of the technology we have does the thinking for kids."

HEATHER SCHUGAR

A LITERACY PROFESSOR AT WEST CHESTER UNIVERSITY

'Not a Computerized Process'

Part of the problem is that the technology tools now available for early-literacy instruction are all over the map when it comes to quality.

Some older technologies, including public television shows such as Sesame Street, Between the Lions, and Super WHY, have a robust research base behind them. But many of the newer apps and software programs currently being marketed to teachers, parents, and caregivers do not.

That doesn't mean that all the digital tools now available to schools are bad. Some, such as the learn-to-read app Homer, have shown evidence of, experts say, are "explicit and systematic" about helping children learn foundational reading skills. That means they take an orderly approach to introducing students to the sounds that make up the English language, showing how those "phonemes" correspond to different letters and letter combinations. They also follow a co-herent progression demonstrating how letters are put together to form words and then sentences.

As an added benefit, some of these technology tools also have advantages over print materials for K-2 students. Electronic books, for example, might include animations demonstrating what a "stampede" looks and sounds like, helping improve comprehension. And where traditional "word work" might involve children spending a half-hour or more cutting out printed words and sorting them into groups based on whether they feature a longa or short-a sound, digital tools allow for that same process to be done more efficiently, via dragging and dropping on a screen.

Still, those same features can also be coun-

terproductive. Most experts say it's critical that young children learn to sound out unfamiliar words, for example, but some animations may pull their attention away from printed text. Likewise, some digital word-sort tools automatically correct children when they place a word in an incorrect sound-group, limiting the child's opportunities to discover and learn from mistakes.

"Part of learning to read is going through struggle," said Heather Schugar, a literacy professor at West Chester University. "But a lot of the technology we have does the thinking for kids."

Bigger picture, even the best digital tools are intended to complement classroom instruction. There's a world of difference between letting students use an app to practice and reinforce specific literacy skills and teaching those same skills from scratch in a way that will motivate an individual child based on his or her unique real-world interests, background knowledge, and strengths.

The nuanced feedback that only humans can provide is crucial to good literacy instruction, said Elena Forzani, an assistant professor of literacy education at Boston University. Imagine a 1st grader struggling over words as she reads aloud. A good teacher will already have a strong sense of who a child is and what he or she knows and will be closely attuned to things like facial expressions and body language as the child reads—information that will, in turn, shape the responses and en-couragement the teacher offers.

Good teachers will also try to identify misunderstandings in real-time. Is the problem that a child doesn't understand that the letters "s-l-e-d" form the word "sled?" Or is the problem that the child doesn't understand the concept of a sled?

Those are the kinds of instructional decisions that technology simply can't make, experts said.

"Learning to read is not a computerized process," said Lisa Guernsey, a senior education policy advisor at New America and coauthor of Tap, Click, Read.

Reading Instruction Via Zoom

In many ways, then, the more pressing question facing schools is whether human teachers can provide high-quality reading instruction over videoconferencing platforms such as Zoom, Skype, and Google Meet.

The experts consulted by Education Week generally believed that the types of humanto-human attention and feedback described above are at least possible when teachers and students are connected via screens. University of Michigan literacy professor Nell Duke, for example, produced last spring a series of videos showing what good remote instruction in foundational reading skills looks like.

In one video, Duke provided explicit phonics instruction around the sound "oi" to literacy coaches playing the role of students, whom she interacted with online, via Zoom.

"First, let's see if you can say that sound. Ruth, can you say 'oi' for us?" Duke began, listening closely as each student enunciated the sound on the separate panels on her screen. Then, she read a series of words, asking the students to indicate whether each contained the 'oi' sound, followed by direct instruction.

"So that sound 'oi' is in a lot of words. And we have two ways we usually spell the 'oi'

66

Districts were just starting to form their [back to school] plans in late August, and many are still scrambling to figure out what this should look like for our youngest learners. That's what I'm worried about."

SEETA PAI

EXECUTIVE DIRECTOR OF EDUCATION, BOSTON-BASED PUBLIC TELEVISION STATION GBH

sound," Duke told the faces on her screen. "We either spell it with an 'o-y,' like in 'toy,' or we spell it with an 'o-i,' like in 'coin."

Throughout, she used technology features to interact with the group and gauge each student's understanding. After reading out sample words, for example, Duke asked the students to click the platform's "thumbs up" or "thumbs down" buttons to indicate whether each contained the 'oi' sound. During her direct instruction, she also shared PowerPoint slides with pictures of a toy and a coin to reinforce her point.

In a second video, during an "interactive writing lesson," she and her students worked

together on Google Jamboard to write a letter that began 'Dear Dave.' Some of the children used the mouse on their computer to draw the letter 'D,' and Duke would then ask the children to say what sound the letter 'D' made, alone, and then together as a group.

In an interview, Duke told Education Week that such instructional practices are already backed by significant research when used in-person. Because there is such little evidence about teaching children to read remotely, she recommends educators focus on trying to reproduce these practices when using videoconferencing tools.

"Let's take what works in the classroom and try to figure out how to create a digital version of that," she said.

Challenges to such an approach abound, however. If children or teachers don't have access to a device or the internet, such instruction can't get off the ground. If the audio quality of a Zoom session is choppy, clearly communicating specific sounds and gauging whether students are able to recognize them becomes very difficult.

Plus, writing a letter on paper with a pencil is very different than drawing a letter on screen with a mouse; researchers don't yet know if the two approaches have the same effect on children's learning, but it is clear the latter approach will usually require dedicated time for explicit instruction on how to use technology tools correctly.

And the biggest barrier of all to reading instruction-via-videoconference may be numbers. It's not realistic to expect teachers to engage and closely monitor 20-plus young children in 20-plus separate Zoom panels on their screens for an extended period of time.

Such realities must be taken into account when setting expectations for reading instruction this fall, experts cautioned.

"The question is, can we maintain the integrity of the techniques that we know work, while dealing with the affordances and constraints of the digital environment?" Duke said.

'That's What I'm Worried About'

For some in the early-literacy world, the massive experiment ahead offers at least one reason for excitement.

"We've been using technology for the sake of using technology, without really having a conscious plan for 'why," said Schugar, the West Chester University professor. "Now is the time to think about how we really leverage these very powerful tools."

Far more prevalent, though, are worries that states and districts failed to use the summer to develop reopening plans with sound literacy instructional practices, potentially missing the window to avoid disaster this fall. Especially concerning are some schools' stubborn attachments to debunked practices that minimize the importance of explicit phonics instruction, as well as the lack of training that teachers have been given to translate proven practices into the digital and online worlds.

"Districts were just starting to form their [back to school] plans in late August, and many are still scrambling to figure out what this should look like for our youngest learners," Seeta Pai, the executive director of education at Boston-based public television station GBH and a former lead researcher at Sesame Workshop and Common-Sense Media. "That's what I'm worried about."

Given the broader context in which schools are operating, it's easy to believe that muddling through might be the best we can hope for in the months ahead.

That would be a better outcome than what happened last spring, when thousands of America's emerging readers are believed to have dropped out of remote instruction altogether. Countless more received spotty instruction that fueled fears of widespread learning loss.

In the months since, the number of coronavirus deaths in the country has surged above 200,000; federal unemployment benefits stopped for many struggling families; Congress failed to act on financial help for struggling states and school districts; and waves of civil unrest followed police shootings of Black citizens.

As a result, a generation of young children has headed to school, some for the first time, many having endured significant trauma, often without having been able to visit a library or sit with a teacher or share a book with a friend in months. Many districts began the new year without adequate or reliable diagnostic tools to remotely assess where these children are starting their reading journeys. Teachers have been left to tackle a big challenge, with little support.

It's no surprise, then, what teachers and parents of young children have told experts like Pai of GBH as the new year gets under-

"The number one thing we're seeing is anxiety," she said. ■



Published on 9/29/2020

How to Teach Reading With a Digital Mindset: Researcher Nell Duke's Advice

By Mark Lieberman

chool building closures during the COVID-19 pandemic have hit younger students particularly hard. One of the key functions of schools for early-age students is laying the foundation for the basic reading skills that will be essential for the rest of their lives.

Millions of students across the country are continuing to learn at home as the 2020-21 school year begins. That means educators need new tools to keep reading instruction consistent and new philosophies for engaging students at a distance.

Nell Duke, a professor of literacy, language, and culture at the University of Michigan School of Education, has been examining the literature and developing new instructional practices to meet the ever-shifting challenges of the pandemic and its effect on schools. Education Week asked her how teachers should adjust their practices and recalibrate their priorities to ensure students are gaining fundamental reading skills.

What are the biggest difficulties teaching reading with digital tools?

In an asynchronous context, the problem is that there's not a direct teacher presence. The teacher presence can only be through artifacts: a worksheet, a set of instructions, a set of books the teacher leads, a video the child can

RECOGNIZE THE LITERACY CHAMPION IN YOUR LIFE

Do you know a special educator who lives and breathes the Science of Reading, is dedicated to literacy education, and makes a difference in the lives of his or her students?

We want to reward your Literacy Champion!

Tell us about an educator you know whose dedication to literacy success for all of their students is exemplary. We want to hear about:

- Resilience
- Commitment to the Science of Reading
- Strength
- Joy in helping students achieve literacy milestones

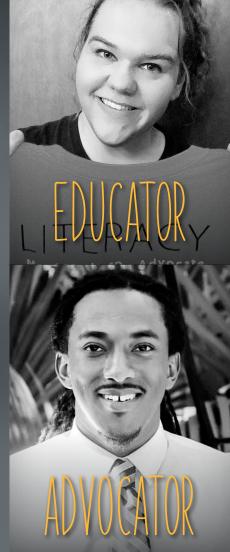


Teachers are the most important factor in student success.

They use lessons based on reading science and understand the process of learning to read and write. Research proves it. Science matters."

DR. LOUISA MOATS

Literacy Expert and Co-Author of LETRS® Professional Development







Nominate a Literacy Champion Today voyagersopris.com/sites/letrs-champions

Lexia a cambium company

access through community television. The research we have shows what makes a substantial difference in children's literacy development almost always is teacher-mediated: The teacher making a certain instructional move, or coaching in a certain way. We just don't know how to move the needle substantially for children in early literacy without direct contact and interaction.

A number of PBS kids television programs have been tested in research and have been shown to foster children's development. Some computer programs and devices are designed to be able to be used offline, like OneTab from Open Up Resources. They seem to be able to help kids get a little bit better at certain foundational literacy skills tasks. But they don't get kids to the point where they're meeting gradelevel standards in literacy from working on those devices.

The synchronous context, I have a lot more optimism about. There are a lot of research-tested instructional techniques that can be used through videoconferencing. They need to be modified somewhat to make sense for that context, but versions of them are similar enough that they would still work. You can still do phonics instruction by videoconference. You can still listen to children read and use information from that to plan future instruction. You can still work on more phonological awareness. You can still read to them and do an interactive read-aloud. It's a little more awkward, it's a little clunkier [than in-person instruction].

Will it be possible for teachers to mitigate that awkwardness and clunkiness?

No matter how how hard we try, no matter how much we plan, there's no way that teaching online via videoconference is going to be the same as teaching in the classroom. I think that shifting that mindset's really helpful because we're not constantly disappointing ourselves.

The key is to not take a deficit perspective on remote teaching. It's probably not healthy, and it's certainly not productive, to constantly focus on what these remote teaching contexts can't do.

An analogy that I think might be helpful is keeping in touch with our aunt who lives across the country. We can think about FaceTiming with our aunt: I can see how she's feeling, I can see her smile. But there are also some constraints. The line may be choppier. I may see that she has a sink full of dishes and



The synchronous context, I have a lot more optimism about. There are a lot of research-tested instructional techniques that can be used through videoconferencing."

NELL DUKE

PROFESSOR OF LITERACY, LANGUAGE, AND CULTURE AT THE UNIVERSITY OF MICHIGAN SCHOOL OF EDUCATION

feel bad that I'm not there to help her. Different media are going to afford us some things and they're going to have some limitations. That's the mindset we want to bring to teaching remotely.

With phonological awareness instruction, it can be difficult to hear children's articulation, which really matters. But what are the affordances? Every child can type a response in the chat box, and then I'm hearing from every single child, and I'm seeing their response associated with their name. You can download some videoconference platforms that automatically transcribe the chat, so you can look back and use that as an assessment tool. In just that one case, we see a downside, but we also see some opportunities or affordances.

What will teachers need to unlearn to shift to a digital mindset?

Education tends to have a strong book bias. Depending on the circumstances in a remote context, it may be difficult to get books to kids and get them back from kids. It's almost impossible for the teacher to ensure that every kid has a copy of the books that they're reading or teaching from. The way to approach that is to broaden our idea about what constitutes a text that would be valuable for young children: online magazines and websites; having students write themselves and read each other's texts; even texts that teachers write themselves. I know that sounds like a lot of work, but sometimes it can be faster to write a text ourselves than it is to find exactly the right text

for our teaching point. There are of course online books from sites like textproject.org, too.

The absolute No. 1 effective remote teaching strategy would be "interaction." What a lot of very well-intentioned people have done is to record read-aloud books for kids. But the problem is much of the value educationally in read-alouds lies in the interaction around the book, not in the book itself. Reading a book straight through for kids is not actually getting us what we need educationally. We don't have the physical tool of our body to help keep kids engaged, so we even more so need that interaction around the text.

The pandemic has undoubtedly exacerbated inequities for public school students. How can teachers make sure remote learning is working for all students?

Getting information about technological resources and context at home is really important. How often does the internet work? What kind of internet do you have? How many people in the home will be on the internet at the same time? Who might be in the same room with your child when your child is [engaged in] school learning? Getting that information upfront can be really helpful so the teacher can plan accordingly. A follow-up phone call with a child whose internet dropped to hear what that child had to say about the book that they were reading—a little opportunity for instruction with that child—could be a workaround as well.

What should educators prioritize given the time constraints of remote learning?

All of these benchmarks in literacy are socially constructed. The way we decide what constitutes 3rd grade reading is some combination of community members and teachers at the state level get together with a bunch of test items and decide what percentage of those test items kids should get right at that age. It would be perfectly legitimate for our society [during COVID-19] to decide that we have a different set of standards, [and] we're going to focus on moving every kid forward, but we're not going to focus on getting every kid to the socially constructed benchmark that we decided on pre-pandemic. All aspects of literacy development are important. It's definitely important for people to continue to read words and spell words. But it's also really important for kids to continue to develop in their content knowledge-math and science and social studies, which research finds is actually highly related to children's long-term reading success.



Published on 12/16/2020

Is This the End of 'Three Cueing'?

By Sarah Schwartz

ueing has, for decades now, been a staple of early reading instruction.

The strategy—which is also known as three-cueing, or MSV—involves prompting students to draw on context and sentence structure, along with letters, to identify words. But it isn't the most effective way for beginning readers to learn how to decode printed text.

Research has shown that encouraging kids to check the picture when they come to a tricky word, or to hypothesize what word would work in the sentence, can take their focus away from the word itself—lowering the chances that they'll use their understanding of letter sounds to read through the word part-by-part, and be able to recognize it more quickly the next time they see it.

Still, three-cueing is everywhere: in curriculum materials that instruct teachers to prompt students with "think what kind of word would fit;" in classroom anchor charts that encourage making a guess after looking at the first letter of the word and the illustration on the page; in popular assessment tools.

Reporting over the last few years, from American Public Media, Education Week, and others, has demonstrated the extent to which these strategies pervade early literacy instruction, and explained why the research suggests they aren't effective tools for instructing young readers in cracking the alphabetic code.

In 2019, an EdWeek Research Center survey found that 75 percent of K-2 and elementary special education teachers use the method to teach students how to read, and 65 percent of college of education professors teach it.

Now, there are signs that cueing's hold on reading instruction may be loosening. Recently, one of the most influential reading programs in the country took a step away from the method—raising questions about whether other publishers will follow suit, and whether changes to written materials will lead to shifts in classroom practice.

'Cautiously Optimistic'

In a document that circulated, the Teachers College Reading and Writing Project, which develops the popular Units of Study for Teaching Reading curriculum, lays out a series of changes to its philosophy of early reading instruction.

Lucy Calkins, the founding director of TCRWP, is one of the biggest players in the early reading market: Her Units of Study curriculum, commonly known as "reading workshop," is used by 16 percent of K-2 and elementary special education teachers, according to the 2019 EdWeek Research Center

survey. The recent document covers a range of issues, from phonics instruction to text types to addressing dyslexia. And it outlines a new approach to word-solving for the organization that steps away from cueing.

"The TCRWP has always recommended that teachers coach kids who encounter unfamiliar words to be active word solvers, but until recently, we have encouraged kids to draw on all their resources to word solve, which meant both asking, 'What word would make sense there?' and also asking, 'What do the letters say?'" Calkins wrote in an emailed statement to Education Week in late October. (Calkins declined an on-the-record phone interview with Education Week.)

"We are now recommending that for readers in the early stages of reading development, there are times for prompting for meaning and times for prompting for word solving." When a student is "stuck on an unfamiliar word," she wrote, "it is important that teachers prompt kids to draw on their phonics knowledge."

Cueing is a commonly used strategy in early reading instruction, in which teachers prompt students to draw on multiple sources of information to identify words. It's based on the now disproven theory that reading is a series of strategic guesses, informed by context clues.

The strategy is also referred to as "threecueing," for the three different sources of information that teachers tell students to use: 1) meaning drawn from context or pictures, 2) syntax, and 3) visual information, meaning letters or parts of words.

Many teachers also refer to cueing as MSV, an acronym that stands for each of the three sources of information: meaning, structure/syntax, and visual.

This does represent a shift in approach, said P. David Pearson, an emeritus professor and the former dean of the University of California, Berkeley's Graduate School of Education. But he argues that it's more of a "tweak" than a radical overhaul.

"She's saying, go for the code first, and then add in the meaning," Pearson said. "But I think she would say that it's still a balanced approach, and you're still using all the resources available to you."

Laura Stewart, national director of The Reading League, an organization that advocates for science-based reading instruction, said she is "cautiously optimistic" that the changes could bring a significant shift in how teachers think about cueing. Still, she said of Calkins, "it feels like her evolution has a lot to do with defending her turf."

Calkins, for her part, says that the changes were prompted by a close reading of research, work with teachers and students, and a partnership with the Child Mind Institute, an organization that supports children with mental health and learning disorders. She claims that EdWeek articles regarding the program have "fueled controversies."

"We do children and teachers a disservice when we divide ourselves into camps, demonizing and misrepresenting each other," she wrote, in the statement. "I've tried, instead, to listen and learn from proponents of the science of reading, and to encourage other balanced literacy educators to do so as well."

Change on the Horizon?

Research on the importance of explicit, systematic phonics—and the comparative ineffectiveness of using contextual and syntactic cues to identify words—has existed for decades. For now, though, other major literacy players that employ cueing in their instructional methods haven't announced similar shifts

Education Week also asked Fountas and Pinnell, one of the most popular early reading programs, whether it planned to make any changes to how its materials prompted children to identify words. Current versions of the materials for early readers instruct teachers to prompt students with the questions, "What would make sense?" and "Does it look right?" Irene Fountas and Gay Su Pinnell, authors of the program, declined comment through their publisher, Heinemann.

Reading Recovery, a popular reading intervention approach that also uses cueing, did not note any specific upcoming changes to the method. However, Billy Molasso, the executive director of the Reading Recovery Council of North America, said that the organization does not view reading instruction as "static."

"[A]s we learn more about literacy processing and our students and teachers change over time, we have to continue to refine our strategies, enhance our instructional dexterity, and integrate better ways to meet the specific struggles of our emerging readers," he wrote in a statement to Education Week. "We look forward to continued robust conversations about how to strengthen early literacy education."

Still, addressing the persistence of cueing is a challenge that goes beyond curricula, said Emily Solari, a professor of reading education at the University of Virginia's Curry School of Education and Human Development.

WHAT IS 'CUEING'? A KEY TO THE TERMS

Cueing is a commonly used strategy in early reading instruction, in which teachers prompt students to draw on multiple sources of information to identify words. It's based on the now disproven theory that reading is a series of strategic guesses, informed by context clues.

The strategy is also referred to as "three-cueing," for the three different sources of information that teachers tell students to use: 1) meaning drawn from context or pictures, 2) syntax, and 3) visual information, meaning letters or parts of words.

Many teachers also refer to cueing as MSV, an acronym that stands for each of the three sources of information: meaning, structure/syntax, and visual.

"We have generations of teachers who haven't been provided adequate training on how to teach reading, through no fault of their own," she said. "There are multiple things you have to push on—and just changing one curriculum, even a widely purchased and used curriculum, it's not a silver bullet."

Some reading teachers agree.

"If teachers aren't strong in their knowledge about how kids read and how kids write, changes in the curricula are not, in my personal opinion, going to make a big shift," said Jeanne Schopf, a middle school reading specialist, interventionist, and coach in Sturgeon Bay, Wis. "They're going to go back to what they're comfortable doing."

Schopf, who has taught both elementary and middle school in her 31 years as an educator, said she'd like to see institutional shifts at teachers' colleges and universities. If teachers don't learn about evidence-based practices there, it can be hard to introduce them later, she said.

For David Pelc, the process of instructional change is deeply interpersonal and gradual. When Pelc, an elementary reading interventionist in Romulus, Mich., started learning more about explicit, systematic early reading instruction, he introduced it to teachers "little by little," he said.

He had conversations with teachers who he knew trusted his perspective; he worked alongside others in their classrooms, demonstrating phonemic awareness activities they could do with their students. "I didn't say, 'Hey, this is what we need to do; it makes more sense.' I would say, 'Hey, check this out, it's so cool," he said.

Now, of course, there's an additional layer of challenge involved in any change process: Teachers are overwhelmed with the demands of distance learning, and school and district leaders are stretched thin.

But Pelc also wonders whether teachers' willingness to try out new strategies during this time might open a door. He's put together screencasts demonstrating evidence-based instruction, and a few teachers have mentioned to him that they've watched them.

"Both teachers and students are getting more resourceful," Pelc said. "They're looking for information and getting it faster."

Origins of Cueing

TCRWP doesn't generally use the phrase "cueing" to describe its approach to reading and writing instruction. Even so, the strategies and philosophies that underlie this approach have been a part of the instruction in the program, and in other widely used early reading curricula.

The idea that children use "cueing systems" to read was popularized by several influential reading researchers in the 1960s and '70s.

Kenneth Goodman, the late education researcher who was considered the founding father of whole language, theorized that good readers make predictions about what the words on the page say by drawing on multiple sources of information. This theory was largely based on Goodman's analysis of students' errors, or "miscues," while reading.

He saw that students might use graphic information—i.e., the letters—to phonetically decode the word, or part of it. But they also use their understanding of syntax, suggesting in-



I have always held the position that every single child is entitled to systematic, explicit phonics instruction, and that every school must adopt a planned, sequential phonics curriculum."

LUCY CALKINS

THE FOUNDING DIRECTOR OF TEACHERS COLLEGE READING AND WRITING PROJECT

correct words that nonetheless conform to the structure of written language, and their grasp on the meaning of the story, predicting words that would complete a coherent thought.

Within this framework, the goal of the reading teacher is not to make sure that beginning readers attend to every part of every word, but to "help them to select the most productive cues," Goodman wrote.

At the same time, New Zealand researcher Marie Clay was developing running records—a system of analyzing students' oral reading errors with a similar philosophical underpinning to Goodman's work. Teachers listen to students read a book or passage, and for every miscue, note which source of information students are drawing on that caused them to make the error: meaning, syntax, or visual information (letters).

Running records are a cornerstone of Reading Recovery, the intervention program Clay developed. But they're also widely used as an assessment tool outside of Reading Recovery, and a key piece of many packaged reading programs.

Over the past few decades, research has disproved the theory that fluent word reading is the result of a highly sophisticated predicting process. Instead, studies have shown that strong readers attend to the letters in words.

After sounding out a new word a few times, that word becomes recognizable on sight through a process called orthographic mapping. Proficient readers don't need to rely on context or syntax to identify what words say.

Still, listening to students' errors while read-

ing can be "very useful," said Nell Duke, a professor of literacy, language, and culture at the University of Michigan School of Education. With the right tools, teachers can discern which sounds students are struggling with, or whether students are monitoring their comprehension.

"But the MSV approach to doing so I think has led to a lot of misconceptions," Duke said.

The running record is "such an open-ended tool that it's not really clear what to do with what you find," she said. For example, if a student uses context to guess at a word, and gets it wrong, how should a teacher respond?

Some teachers, Duke said, will praise a miscue as long as it makes sense in context—for instance reading the word bunny in place of rabbit. "It's definitely true that it's better that it make sense than not make sense, but it's very important that it not just make sense, but be the actual word," she said.

Not a 'Zero-Sum Game'

Calkins said that TCWRP has made revisions to the Units of Study in Phonics and K-2 Units of Study in Reading curricula to reflect a change in its prompting approach.

The revisions affect, on average, about six pages in each of the 20 phonics books and each of the 20 reading books, and they will be in the next reprint. This new approach was also discussed at a recent free online TCRWP teacher conference, with about 7,000 participants in attendance, Calkins said.

Simply telling teachers to prompt students in a different order may not uproot the more entrenched issues with cueing, Solari, the University of Virginia professor, cautioned. Importantly, she said, students need explicit instruction in phonics before the prompt "look at the letters" can yield any results.

Calkins' materials include a dedicated phonics component, though it wasn't introduced until 2018. Still, Calkins said she has always supported foundational skills instruction, including assisting schools in implementing other phonics curricula, like Fundations and Words Their Way, together with the Units of Study in Reading.

"I have always held the position that every single child is entitled to systematic, explicit phonics instruction, and that every school must adopt a planned, sequential phonics curriculum," she wrote to Education Week.

Without a foundation in letter-sound correspondences, students may pronounce words incorrectly, which could lead to their teachers trying a different cue, Solari said.

"Is it the most awful thing in the world if

a kid reaches an unknown word and they're trying to sound it out, and then they move forward and figure it out by the context? It's not," Solari said. But, she stressed, it's better if they can decode it.

"If they're having a hard time figuring out one word, they're probably having trouble figuring out the other words. So using the context is not even on the table," she added.

Of course, researchers emphasize, this doesn't mean that students shouldn't pay attention to the meaning and structure of the text that they're reading.

In an often-cited 1998 article on cueing, reading researcher Marilyn Jager Adams wrote that semantic and syntactic knowledge are essential to reading. They, in addition to the ability to read printed words, are all equally neces-



If the original premise of the three-cueing system was that the reason for reading the words is to understand the text, it has since been oddly converted such that, in effect, the reason for understanding the text is in order to figure out the words."

MARILYN JAGER ADAMS

READING RESEARCHER

sary for understanding the meaning of a text.

"If the original premise of the three-cueing system was that the reason for reading the words is to understand the text, it has since been oddly converted such that, in effect, the reason for understanding the text is in order to figure out the words," Adams wrote.

In her statement to Education Week, Calkins indicated that teachers can prompt students to think about meaning—but in moments when they're trying to comprehend text they've already read, not when they're still working on decoding it.

It's a subtle, but very important, distinction, said Duke, who created a chart to sup-

port teachers in deciding when to use prompts related to meaning. "Before they identify the word, they really need to be looking at letters and groups of letters in the word to figure out what that word is," she said. After the child has

correctly read a sentence, she said, then they can use context to figure out the meaning of any word they don't understand.

"What I'd like to see is not the perpetuation that it's an either or, that it's a zero-sum game.

That somehow if you focus on the foundational skills, that somehow you're detracting from meaning," said Stewart, of The Reading League. "Phonics, having kids sound out words, is the runway to meaning."

Published on 12/3/2020

Will the Science of Reading Catch On in Teacher Prep?

By Madeline Will

ary Sacchetti spent six years and tens of thousands of dollars preparing to become a special education teacher and then a reading specialist.

But even after she earned her master's degree from a highly ranked university, she still felt like she didn't have the necessary knowledge and skills to teach all students how to read. It wasn't until her Philadelphia charter school paid for Sacchetti to earn certification through an explicit, systematic phonics program that she finally understood the evidence-based strategies for teaching early read-ing.

"That's when I was like, 'Oh my God, I did not know any of this,' "said Sacchetti, who has since left education to stay at home with her children. "The fact that it's systematic, the fact that there are rules—I just felt so empowered.

"Now I feel like I could take a student, and I could teach them how to read, whereas before, I felt like I was just reading with kids," she continued. "How many students are not learning how to read because teachers are not teaching them to read? Not with bad intentions, but because they don't know."

After all, many teachers likely did not learn the cognitive science behind reading in their teacher preparation programs. While decades of research have shown that teaching young students how to crack the code of written language through systematic phonics is the most reliable way to make sure that they learn how to read words, that approach to reading has not made its way into many preservice programs.

For many decades, teacher educators were divided into two camps: those who favored whole language, characterized by the idea that reading is a natural process gained through exposure to authentic texts, and those who believed in systematic phonics instruction, which is the explicit teaching



Leander Bridges, the assistant principal at Laurel Upper Elementary in Laurel, Miss., sounds out vowels during a training session at the University of Southern Mississippi.

of sound-letter relationships. The so-called "reading wars" led to the convening of a National Reading Panel in 2000, which found evidence that explicit phonics lessons help kids become better readers. The review did not find the same about whole language.

The National Reading Panel named five essential components of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. To be a reader, a student must learn how to decode words and also comprehend them.

"A fundamental piece of whole language is that reading is natural," said Amy Murdoch, an associate professor and the director of the reading science program at Mount St. Joseph University in Cincinnati. "And what the science shows is that is absolutely not true. Reading is something humans invented, and it's not at all natural."

Over the years, whole language has fallen

out of vogue, and an approach known as balanced literacy has gained traction—in fact, nearly 70 percent of teachers say that's their philosophy, according to an Education Week Research Center survey. Proponents say balanced literacy combines explicit instruction, guided practice, and independent reading and writing. Critics, however, say that balanced literacy is just whole language rebranded, with a bit of phonics sprinkled in.

"Who wouldn't want balance?" Murdoch said. "Many people look to balanced literacy as the answer. But what balanced literacy typically is, is not systematic, explicit instruction."

Even so, balanced literacy dominates the nation's colleges of education. In an Education Week Research Center survey of more than 530 professors of reading instruction, just 22 percent said their philosophy of teaching early reading centered on explicit, systematic phonics with comprehension as a separate focus.

Students in this Colorado District Make Significant Literacy Gains When Educators Are Trained in *LETRS* Professional Development

Littleton's Challenge

Colorado's Littleton Public Schools (LPS), located a few miles south of Denver, is a high-achieving school district that serves approximately 15,000 students. With a longstanding tradition of excellence, LPS was the only school district in the Denver-metro area to receive the Colorado Department of Education's highest-accreditation rating all eight years it had been offered.

A large part of LPS's success stems from the district's support of its educators. After all, when teachers are supported, students can excel. Research shows that teachers are THE most powerful factor in student academic success. Thus, when LPS implemented a Structured Literacy curriculum in the 2017–2018 school year for grades K–2, supporting teachers through the transition and beyond was paramount.

A New Focus on the Science of Reading

At the time, many of the teachers were using the Balanced Literacy approach to teaching early literacy, and LPS students were not at the level they needed to be for phonemic awareness. Administration recognized that teachers needed to understand and be trained in the science of reading pedagogy, and LETRS® (Language Essentials for Teachers of Reading and Spelling) was the best literacy training solution to build capacity.

"We recognized we needed to support our educators in understanding the approaches and instructional ideas that are incorporated in a Structured Literacy curriculum," said Amy McIntosh, LPS' Innovation, Equity, and Learning coordinator. The teachers' previous instructional strategies were not matching up with the new systematic approach, so staff sought new strategies to help teachers reach all students. "We knew we wanted to be able to offer more to our students, ultimately, through developing the capacity of our teachers," said Heidi Wagner, who also works as part of the district's Innovation, Equity, and Learning staff.

Along Comes a Solution

"More" came in the form of Voyager Sopris Learning's *LETRS* professional development solution for K–12 educators. With more than a decade of demonstrated success in schools and districts across the U.S., *LETRS* professional learning was the ideal solution for LPS to provide teachers with the skills they need to master the fundamentals of reading instruction—phonological awareness, phonics, fluency, vocabulary, comprehension, writing, and language.

A Systematic Approach to Improving Reading Instruction

Based on science of reading pedagogy and accredited by the International Dyslexia Association, *LETRS* offers educators the background, depth of knowledge, and tools to teach language and literacy skills to every student—and it can be used regardless of the literacy program in use.

Littleton's Educators Feel Empowered After Training

"We looked at a few different options, and district leadership chose *LETRS*," McIntosh said. "It had the most in-depth and comprehensive approach to understanding the science of learning to read and to spell."

LPS implemented *LETRS* for the 2018–2019 school year with an initial cohort of 44 educators that included K–2 classroom teachers, special education teachers, literacy specialists, instructional coaches, and administrators. The district's third cohort launched in fall 2020, expanding to K–3 teachers. By the 2021–2022 school year, the district plans to have all preschool educators trained using *LETRS®* for Early Childhood Educators.



Littleton students now work with teachers on sounds and facial expressions as they learn reading and spelling.







"Not a day goes by without a fellow educator asking me when he or she will have the opportunity to participate in *LETRS*," Wagner said. "At a time when the demands on teachers are many, the fact that our colleagues are eagerly signing up for *LETRS* training is telling in and of itself: Once educators get a taste of *LETRS* it leaves them craving more."

Teacher Jan Kempf, a member of the LPS literacy curriculum selection team with more than 20 years' experience teaching kindergarten and third grade, has been thrilled with the *LETRS* training and what it brings to her teaching.

"LETRS helped me understand the curriculum in a deeper way, as well as gave me ideas for how to adjust it to meet the needs of my students," she said. "Overall, LETRS gave me new confidence in my teaching practice."



LETRS is the best training I have received in my career."

CARRIE ORCUTT
INSTRUCTIONAL COACH

Echoing Kempf, LPS' Carrie Orcutt said *LETRS* empowered her as a coach to feel confident in her ability to support and collaborate with teachers as they navigate their literacy instruction.

"Before *LETRS*, I was trying to pull from too many resources, which led to confusion and a lot of wasted time seeking information and strategies to pass on to teachers," said Orcutt, an instructional coach. "Now, my literacy support and coaching is focused, and when I provide resources for teachers, I am confident that I am doing what is best for the teachers and the students. *LETRS* is the best training I have received in my career."



Students participate in activities that help them become strong readers with solid foundational skills.

The professional development solution is helping LPS develop strong readers with solid foundational skills that will allow them to be successful in their literacy development throughout their education, Orcutt said. She added that *LETRS* is helping teachers understand how students learn to read while also providing workable strategies to target and differentiate students in small-group instruction.

"Overall, it has helped fill gaps for teachers in their literacy knowledge and enhanced skills to move forward using a phonics-based curriculum," Orcutt said.

"It ensures my students aren't struggling due to lack of systematic and appropriate instruction," she said. "Students from the *LETRS*-trained teachers are the most likely to have strong phonological and phonemic awareness, which was not true prior to this training. The kindergartners are much more successful with blending sounds and knowing better sounds automatically."

An Intense and Transformative Journey

"Having been in the field of education for 20 years—as a primary and intermediate classroom teacher, literacy teacher leader, a building administrator, and an instructional coach at the district level—I can say with absolute certainty that equipping educators with *LETRS* knowledge has the potential to positively impact the lives of children more than any other professional learning you could offer," Wagner shared.

Students Are the Real Winners

While *LETRS* has energized staff members and boosted their confidence, many who have gone through the training say those benefitting most are the students.

"Reading is an essential skill that can make or break a child's future," Kempf said. "The *LETRS* course empowered me with more knowledge. Now, I know what to look for and am better able to help my students grow needed skills. In building their confidence as readers, we are laying a strong foundation for future growth, enabling their success in all aspects of learning."



Contact us to explore *LETRS*. **voyagersopris.com/LETRS**







Most—57 percent—said they ascribed to a balanced literacy philosophy. Only 4 percent said that their philosophy was whole language.

Of course, balanced literacy can be defined in many different ways. Professors gave definitions that ranged from basing instruction in all five components of reading and giving equal focus to decoding and meaning-making to immersing students in authentic texts with phonics on the side.

Nearly a fifth of professors said they agree or strongly agree with the idea that most students will learn to read on their own if given the right books and time to read them. And while most professors correctly identified the five essential components of reading, phonics was the least known—87 percent of professors picked that, compared to the 95 percent of professors who picked comprehension. Twelve percent of professors incorrectly picked exposure to authentic and meaningful texts.

Like Sacchetti, many teachers have said they feel like they were cheated out of learning how to teach reading from their preparation programs.

A common refrain from graduate students, Murdoch said, has been, "You've told me everything I learned in undergrad is wrong, and I've been teaching reading the wrong way. Why didn't I learn this in undergrad?"

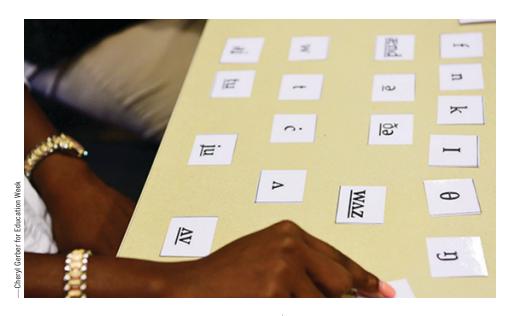
A 'Lockstep' Approach?

Professors who are skeptical of systematic phonics instruction told Education Week that phonics is necessary—but they don't want it to be done in isolation, without opportunities for students to make meaning of the words they're learning to read. And they worry a systematic approach can make it harder for teachers to differentiate instruction for advanced readers.

"Yes, readers do need to know how to decode words. That's not even a question," said Mary Lose, a professor of reading and language arts at Oakland University in Rochester, Mich. "Yet this label [of systematic phonics] is least aligned with my philosophy because it suggests a lockstep approach to phonics teaching and learning that doesn't take into account what each child already knows, and it proposes a one-size-fits-all approach to supporting a child's decoding skills."

The Education Week Research Center survey found that 55 percent of professors said they put "a lot" of emphasis on phonics in their courses; 36 percent said "some," and 5 percent said "a little."

More than half of professors said they



thought students could understand unfamiliar words they see on the page even if they don't have a good grasp of phonics. Melanie Keel, an assistant education professor at Wingate University in North Carolina, said many students can learn to read with minimal phonics, or when phonics is incorporated through a balanced literacy approach.

"When we say everyone has to do it this way, when we have kids that already know it and it just comes more naturally for them, then we're doing them a disservice," she said. "We can push them in other ways to help them grow as readers in areas that they need, more than one-size-fits-all, 'this is how we're going to do our whole class.' I think it really comes down to what the children in your class need and knowing your children as readers."

Even so, Murdoch said frequent assessments are key to a systematic, explicit approach to reading instruction.

"We want to understand exactly where a child is and match the instruction where they are," she said.

According to research from the International Dyslexia Association, more than a third of students can learn to read with broad instruction that includes just a bit of phonics. A much smaller percentage—anywhere from 1 percent to 7 percent, depending on the estimate—will learn to read no matter what, by figuring out how to decode words on their own.

But the rest do need systematic phonics to be proficient readers, and all students could benefit from it, experts say.

Otherwise, teachers might not realize that some students are struggling to read and instead are relying on pictures and context clues to get by, said Deborah Reed, the director of the Iowa Mississippi teachers and aspiring teachers attend a training session on a science-based reading program.

Reading Research Center and an associate education professor at the University of Iowa.

"If you start with the assumption that really, everyone should be fine, and [you] should focus on the love of reading and comprehension skills, then you risk children falling through the cracks," she said. "If you start from the bottom up [with systematic phonics], you can rule out kids who don't need certain instruction."

You Don't Know What You Don't Know

Proponents of systematic phonics instruction say the science is clear. So, why haven't teacher educators gotten on board?

To start, academic freedom makes it so the approach to instruction is left up to individual professors—the dean can't mandate that anyone teaches phonics.

Also, from John Dewey on down, many of the most influential and revered theorists in teacher education have urged an exploratory, project-oriented way of learning, in which students learn principles intuitively. But a systematic, explicit phonics approach typically requires direct instruction and modeling. That's the opposite of what many education professors tell their students is good teaching.

The debates on reading are also highly emotional and polarizing. Even the term "science of reading" can rub people the wrong way, said P. David Pearson, an emeritus professor and the former dean of the University of California, Berkeley's Graduate School of

Education, who considers himself in the "radical middle" between the whole language and the phonics camps.

"As if the other research that's done that shows that vocabulary is important, that comprehension is important, that rich talk about text is important—that those aren't scientific," he said. "Well, they're just as scientific as the research that shows that phonics is important. I resent their appropriating the mantle of science."

For many professors, though, the cognitive research on reading is unfamiliar. A 2012 study from researchers at Texas A&M University and elsewhere deemed this the Peter Effect in preparing reading teachers, after the Bible verse in which the Apostle Peter told a beggar asking for money that he could not give what he himself did not have.

Researchers found that the teacher educators who participated in a training on research-based reading instruction had a significantly better understanding of the cognitive science than those who had not. Notably, the students of the professors who went through the training not only performed better on the reading assessment than their peers—they also scored higher than the teacher educators who hadn't gone through the program.

"If teacher educators do become more knowledgeable themselves, then that carries over to the teacher," said Emily Cantrell, a co-author of the study and a clinical assistant professor of reading and language arts education at Texas A&M University.

Slow-Moving Change

That's why some proponents of systematic, explicit phonics instruction have focused their efforts at the top—training the professors of reading. For example, Murdoch, the Mount St. Joseph professor, said her university is starting a doctoral program focused on the science of reading. It will be one of just a few in the country.

After all, for professors who have spent decades teaching reading instruction a certain way and publishing research, making such a significant change in their practice is hard, those in the field say. They might feel like their reputations are on the line, and such a change requires grappling with the realization that they may have given scores of teacher candidates inadequate training.

"If you've been teaching something for 10, 20, or 30 years, to go back and say, 'Oh, I've been wrong'—that's really hard for somebody to do," Cantrell said.



Transforming the practice of teacher educators has been the focus of Kelly Butler, the chief executive officer of the Barksdale Reading Institute, a nonprofit working to improve the quality of reading education in Mississippi, for nearly two decades now.

In 2003, Butler reviewed eight public teacher-preparation programs in Mississippi to see how they prepared candidates in early literacy instruction. The study found that preservice teachers were getting an average of 20 minutes of phonics instruction over the course of two years in their program, and not all five components of reading were being taught in every program. As a result, the state education department later mandated that every undergraduate elementary education program in Mississippi require two courses in early literacy that cover the five essential components of reading.

Butler published a similar review in 2016 of both the public and private teacher-prep programs in the state, and found that while a lot of progress has been made, many professors still could not explain the scientific principles of reading.

Now, the Barksdale Reading Institute has developed a professional growth model for professors of early literacy across Mississippi. The program is "designed to create safe place for faculty to say, 'Nobody ever taught me this either,'" Butler said.

Initially, about 45 professors from across the state signed up to go through a research-based, commercial program for teaching literacy known as LETRS, or the Language Essentials for Teachers of Reading and Spelling. Of those, about 35 professors completed the faculty-only training.

William Cary University student Alyssa Bussolati and Mississippi teacher Parrish Cumbest show how parts of the brain work together in a LETRS training led by Sandy Dossett (middle).

Then, the Barksdale Institute hosted seminars for the faculty who went through the training to discuss the content of LETRS and learn how to model direct, explicit instruction to preservice candidates. The studies had found that there was virtually no modeling occurring in reading courses, Butler said. (Nationally, 86 percent of professors said they model how to teach phonics in their reading courses, according to the Education Week Research Center survey.)

Of the initial 45 Mississippi professors who signed up, just 28 consistently came to the seminars. And a third of the faculty, when quizzed on the content of the LETRS training, continue to miss basic questions, Butler said.

There have been some bright spots. One of the professors who has transformed her approach to teaching reading is Billie Tingle, an assistant teaching professor at the University of Southern Mississippi. She went through the training and the seminars hosted by the Barksdale Institute, and has since overhauled everything in her early literacy classes that promoted balanced literacy—her Power-Points, her lectures, her assigned textbooks.

"The past couple years, I've really focused on being a learner and making that my priority and hopefully taking [the science of reading] into my classroom, so I can help just one student that will take this and promote it in one classroom, in one school, in one state," Tingle said.

Now, Butler is working with the state superintendent to enact a policy that would require all faculty who teach early literacy courses in Mississippi to be trained in the science of reading and pass a test. However, they're experiencing pushback: The deans of teacher preparation programs in the state have written a unanimous letter saying they're not opposed to LETRS training for faculty—but they don't want to test people who already hold a PhD.

If the state board of education does not pass this policy, Butler said "she's prepared to appeal to state legislators, and urge them to put into law that professors need to know the science of reading—"or the legislature is forever going to spend \$15 million a year to retrain their teachers, which makes no sense."

'A Trend You Cannot Ignore'

Many proponents of systematic phonics are hopeful that the tide is slowly turning—that as states pass legislation requiring teachers to be trained in the science of reading, and as school districts begin to consider teachers' knowledge of brain-based reading principles when hiring, colleges of education will be forced to get on board.

"The universities need to be competitive," said Nancy Scharff, a consultant on instructional strate-gies for the Philadelphia-based campaign Read by 4th. "If you don't have an awakening and say, 'Oh, I see the light, I now love the science,' that's OK. If you embrace the science because it feels like a trend you cannot ignore, that's OK, too."

The mission of Read by 4th is, as the name suggests, to make sure all students in Philadelphia can read on grade level by the time they enter 4th grade. Since 2014, the campaign has been helping colleges of education in the city get accredited by the International Dyslexia Association under its Knowledge and Practice Standards for teachers of reading. Those standards call for systematic, explicit instruction in reading.

So far, four universities in the city have programs that are accredited. By the end of the year, Scharff said, three additional programs might gain accreditation.

Change is slow, she said, but it's aided by the fact that William Hite, the superintendent of the Philadelphia school district, has said he wants to hire teachers who graduated from IDA-accredited programs.

State policy is another motivator. In Arkansas, for example, every elementary and special education teacher must be proficient

in the scientific research on reading by 2021, per a state law passed in 2017 that has caused some colleges of education to change their instruction.

And in Ohio, the state education department has given grants to seven colleges of education to incorporate scientific reading principles in their programs. Murdoch, the Mount

St. Joseph reading science director, and her colleagues have drafted model syllabi for professors who want to revamp their courses.

"I think for the first time in my career, I have real glimmers of hope that in higher ed, there may be room to change," Murdoch said. "We still have a long way to go—but I do see some hope."



OPINION

Published March 19, 2019

Explicit Phonics Instruction: It's Not Just for Students With Dyslexia

By Kyle Redford



hen we know better, we do better." There is something forgiving and

medicinal about that teaching mantra.

I am regularly realizing that I could have taught something more effectively or that I should have been more culturally responsive in my language or practices. Content becomes outdated or is later revealed to be incomplete or inaccurate. Some teaching memories haunt me so much that I have had fantasies about finding ways to apologize to

former students for the cringe-worthy lessons they've endured.

I recently had a wake-up call around reading instruction, and determined I need to intellectually embrace something that I have long suspected: While dyslexics clearly need robust reading instruction (often more specialized and intensive than their peers), their needs are not as distinct from non-dyslexics as I have previously advocated.

This realization—spurred by the extensive research and reporting in the radio documentary Hard Words, by APM Reports' Emily Hanford—is particularly painful because it is connected to dyslexia advocacy work that I have poured myself into over the past decade.

While passionately advocating for the dyslexic's unique instructional needs in articles and essays, presentations and films, I realize now that my advocacy was perpetuating a false distinction when it comes to best practices for whole-classroom instruction.

Scientists have figured out is that learning to read is not natural—it's not like learning to talk or walk, in which all you need is immersion or interaction with your environment. Without structured, evidence-based reading instruction with phonics at its core, many students will struggle with reading and spelling. If teachers are not taught the science of reading (and if schools and districts do not employ evidence-based curricula), many students are deprived of explicit and systematic instruction in how written language works.

In this regard, dyslexics are the canaries in the coal mine. It is no wonder their struggles and suffering have grabbed more attention—they are more significant and severe. However, there are many students, ones who don't struggle with a neurological difference, who I suspect may present as dyslexic because they have simply never been taught the proper skills they need to learn to read, or at least read well.

Effective reading instruction requires teachers to go beyond convincing their students of the importance and wonders of reading. Merely repackaging whole language teaching, which was popularized in the 1980s but has not held up to scientific scrutiny, by adding a sprinkle of phonics here and there is not enough. While reading instruction is enriched by providing book choice, read alouds, and ample time for independent reading-hallmarks of the whole language approach and what's now called "balanced literacy"—those elements alone will not teach early elementary students to decode words. My own intelligent dyslexic child, common sense, decades of research, and 30 years of teaching have taught me that students who don't know how to decode never become great readers. There is no magic.

It does not make sense to design our reading programs based on our students who learn to read effortlessly, without much direct instruction, and then assume the rest will manage to teach themselves to read simply through exposure to books. Experts estimate that maybe half of all kids will learn to read with broad instruction that includes just a bit of phonics. There may be some percentage (perhaps 5 percent) who

will learn to read no matter what. Those students seem to "get" the code with very little teaching. But most kids benefit from sequenced, explicit, code-based instruction to learn how to read words. Students with dyslexia desperately need it, and certainly no one is harmed by it. In fact, even those who learn to read without explicit phonics instruction would likely be better spellers, and perhaps also better readers, with it.

It is time to start looking at reading problems as breakdowns in teaching. We can't hold students responsible for learning skills that we do not explicitly teach them.

A "survival of the fittest" approach to reading creates a profound equity issue. Currently, when students struggle with reading, they often have to go outside the system to gain access to evidence-based reading instruction. Learning to read should not be contingent on parental savvy or financial resources. Weak reading instruction is a betrayal of every student's potential, but most especially those without alternatives.

After listening to Hard Words, I felt guilt and regret about how I had previously framed much of my own thinking and advocacy. I even momentarily considered slinking off into a corner and staying quiet. But the stakes are too high for that. Children's potentials are more important than how this conversation reflects on my own credibility or any fears of possible collegial backlash. My friends in the dyslexia advocacy world may be disappointed that dyslexia is no longer the sole focus of my attention. My teaching colleagues (virtual and real) may be made uncomfortable by my critique of the inadequate teaching that is often peddled as balanced literacy, but lacks a strong early phonics foundation. I accept that.

As uncomfortable as it is to admit my blind spots, it seems essential to the work. In the case of reading instruction, if I am going to ask my fellow teachers to bravely (and critically) look at their own instructional practices and make necessary shifts, I need to name my own mistakes and misunderstandings in this area. Every child needs and deserves access to evidence-based reading instruction, not only dyslexic ones.

Kyle Redford is a 5th grade teacher at Marin Country Day School, a K-8 school in the San Francisco Bay Area. She is also the education editor for the Yale Center for Dyslexia and Creativity.



OPINION

Published on 12/1/2020

An Open Letter to the NAEP Governing Board

By E.D. Hirsch Jr.

on't change the framework for the reading test. It would make the test less accurate not more Dear National Assessment of Educational Progress Board

I write to request that you not approve the proposed replacement of NAEP's assessment of reading comprehension, a change that could go into effect with the 2025 tests.

Like every researcher who is interested in improving the quality and fairness of American schools, I depend on NAEP (often called "the nation's report card") to gauge how well they are preparing our children to become prosperous, competent citizens. Nothing is more important to that preparation than their success in reading and understanding what they read.

As you know, the answer that NAEP currently reports is: not very well.

Along with many others, I'm especially disturbed by the inequalities that NAEP currently reveals in our children's reading-comprehension abilities. For instance, the gap in scores between our white and Black 8th graders is almost a full standard deviation. This gap stems not chiefly from decoding ability but from comprehension ability. It exists largely because of a differential in relevant background knowledge between Black and white students. The proposed changes in the NAEP reading framework include deliberately offering needed background knowledge in preparatory material before the student reads the passage. This is well intended since it seeks to

equalize the relevant knowledge differential between the test takers.

Yet the actual readings that these students will encounter in schoolbooks and websites, as well as in newspapers and the rest of the "real world," do not normally offer such elaborate aids to comprehension. On the contrary, I am daily struck by how much is taken for granted in these sources.

It follows that this revamp of reading assessment would make NAEP's tests less, not more, accurate and useful as sampling devices. By adding these special background clues, the tests fail to sample what they implicitly claim to be sampling. They will become less, not more, predictive of real-world reading-comprehension abilities. Moreover, since NAEP reports on groups, not individuals, the innovation does nothing for the self-esteem or social-emotional well-being of students.

While I admire the urge to be sensitive to the varied cultural backgrounds that students bring to school, that does not change the school's duty to impart the knowledge required to master our common language. That, too, is a sociological imperative, especially in a multicultural nation. Moreover, we know

that our elementary schools can achieve high literacy for all students, no matter their home cultures, because numerous schools are currently doing so, much to the delight of the parents of these children, and much to the benefit of those children's futures.

In short, this well-meant proposal to replace the framework that governs NAEP's reading assessment is not helpful and should be disapproved. It would not accurately report reading comprehension ability. It would not accurately expose the unfair gaps in reading between groups—gaps that we know how to close, that schools should be encouraged to close, and that their customers, the parents and guardians of these children, wish them to close to improve their life chances.

In fact, it is hard to imagine any positive result from this innovation, except possibly to make school improvement seem less urgent—something that no patriot or student well-wisher desires. As you know, the international PISA tests rank U.S. 15-year-olds at No. 25 in the world in their combined scores in reading, science, and math. We now have the 25th best school system in the world!

Of these combined scores in PISA, reading

is the single subject most predictive of overall performance. That's because the very languages of the classroom and of the schoolbook need to be understood by all the students in the class. For that to happen, all the students of the class need just the sort of preparatory background knowledge that NAEP's earnest innovators wish to add to their test items. That preparatory knowledge is key to effective schooling. But the classroom, not the test, is the place to impart it daily and systematically.

So says current cognitive psychology. For more on reading and background knowledge, one could profitably turn to a book by the distinguished cognitive researcher Dan Willingham: Why Don't Students Like School? It contains the immortal sentence: "A reading test is a knowledge test in disguise."

E.D. Hirsch Jr. is the University Professor of Education and Humanities Emeritus and the Linden Kent Memorial Professor of English Emeritus at the University of Virginia, in Charlottesville, and the founder of the Core Knowledge Foundation. His latest book, How to Educate a Citizen: The Power of Shared Knowledge to Unify a Nation, was published in September by Harper.

Copyright ©2021 by Editorial Projects in Education, Inc. All rights reserved. No part of this publication shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic or otherwise, without the written permission of the copyright holder.

Readers may make up to 5 print copies of this publication at no cost for personal, non-commercial use, provided that each includes a full citation of the source.

For additional print or electronic copies of a Spotlight or to buy in bulk, visit www.edweek.org/info/about/reprints.html

Published by Editorial Projects in Education, Inc. 6935 Arlington Road, Suite 100 Bethesda, MD, 20814 Phone: (301) 280-3100 www.edweek.org

SPOTLICHT.

Get the information and perspective you need on the education issues you care about most with Education Week Spotlights

The Achievement Gap • Algebra • Assessment • Autism • Bullying • Charter School Leadership
• Classroom Management • Common Standards • Data-Driven Decisionmaking •
Differentiated Instruction • Dropout Prevention • E-Learning • ELL Assessment and Teaching • ELLs in the Classroom • Flu and Schools • Getting The Most From Your IT Budget • Gifted Education •
Homework • Implementing Common Standards • Inclusion and Assistive Technology •
Math Instruction • Middle and High School Literacy • Motivation • No Child Left Behind • Pay for Performance • Principals • Parental Involvement • Race to the Top • Reading Instruction •
Reinventing Professional Development • Response to Intervention • School Uniforms and Dress Codes • Special Education • STEM in Schools • Teacher Evaluation • Teacher Tips for the New Year • Technology in the Classroom • Tips for New Teachers



VIEW THE COMPLETE COLLECTION OF EDUCATION WEEK SPOTLIGHTS

www.edweek.org/go/spotlights