EDUCATION WEEK
2020

SPOTLIGHT

— Vasiliki Varvaki/Getty

RESPONSE TO INTERVENTION

EDITOR'S NOTE

Response to Intervention is a model to identify struggling students and provide targeted interventions before academic failure. In this Spotlight, learn about obstacles to multitiered systems of supports, explore how RTI can benefit teachers, and consider the research on best early reading instruction practices.

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Commentary

Published December 3, 2019, in Education Week's Special Report: Getting Reading Right

The Most Popular Reading Programs Aren't Backed by Science

By Sarah Schwartz

There's a settled body of research on how best to teach early reading. But when it comes to the multitude of curriculum choices that schools have, it's often hard to parse whether well-marketed programs abide by the evidence.

And making matters more complicated, there's no good way to peek into every elementary reading classroom to see what materials teachers are using.

"It's kind of an understudied issue," said Mark Seidenberg, a cognitive scientist at the University of Wisconsin-Madison and the author of Language at the Speed of Sight: How We Read, Why So Many Can't, and What Can Be Done About It. "[These programs] are put out by large publishers that aren't very forthcoming. It's very hard for researchers to get a hold of very basic data about how widely they're used."

Now, some data are available. In a nationally representative survey, the Education Week Research Center asked K-2 and special education teachers what curricula, programs, and textbooks they had used for early reading instruction in their classrooms.

TOP 5 READING MATERIALS

By Percentage of Teachers Using

43%
Fountas & Pinnell Leveled Literacy Intervention

27
HMH Journeys

19
Reading Recovery

17
HMH Into Reading

16
Units of Study for Teaching Reading Series

Source: Education Week Research Center

The top five include three sets of core instructional materials, meant to be used in whole-class settings: The Units of Study for Teaching Reading, developed by the Teachers College Reading and Writing Project, and Journeys and Into Reading, both by Houghton Mifflin Harcourt. There are also two early interventions, which target specific skills certain students need more practice on: Fountas & Pinnell's Leveled Literacy Intervention and Reading Recovery.

An *Education Week* analysis of the materials found many instances in which these programs diverge from evidence-based practices for teaching reading or supporting struggling students.

At this point, it's widely accepted that reading programs for young kids need to include phonics—and every one of these five programs teaches about sound-letter correspondences. What varies, though, is the nature of this instruction. In some cases, students master a progression of letter-sound relationships in a set-out sequence. In others, phonics instruction is less systematic, raising the possibility that students might not learn or be assessed on certain skills.

Phonics is "buried" in many commercial reading programs, Seidenberg said. Teachers might be able to use what's there to construct a coherent sequence, he said, or they might not.

And frequently, these programs are teaching students to approach words in ways that could undermine the phonics instruction they are receiving.

Several of these interventions and curricula operate under the understanding that students use multiple sources of information, or "cues," to solve words. Those can include the letters on the page, the context in which the word appears, pictures, or the grammatical structure of the sentence.

Observational studies show that poor readers do use different sources of information to predict what words might say. But studies also suggest that skilled readers don't read this way. Neuroscience research has shown that skilled readers process all of the letters in words when they read them, and that they read connected text very quickly.

Even so, many early reading programs are designed to teach students to make better guesses, under the assumption that it will make children better readers. The problem is that it trains kids to believe that they don't always need to look at all of the letters that make up words in order to read them.

Still, teachers may not know that cueing strategies aren't in line with the scientific evidence base around teaching reading, said Heidi Beverine-Curry, the co-founder of The Reading League, an organization that promotes science-based reading instruction.

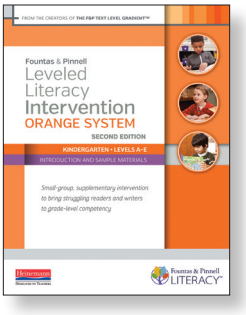
Classroom teachers also aren't usually the people making decisions about what curriculum to use. In *Education Week's* survey, 65 percent of teachers said that their district selected their primary reading programs and materials, while 27 percent said that the decision was up to their school.

Even when teachers want to question their school or district's approach, they may feel pressured to stay silent. *Education Week* spoke with three teachers from different districts who requested that their names not be used in this story, for fear of repercussions from their school systems.

Cueing Strategies Persist

Reading Recovery, the 1st grade intervention used by about 20 percent of teachers surveyed, was developed in the 1970s by New Zealand researcher Marie Clay. Thirty-minute lessons are delivered one-on-one, and generally follow a similar structure day to day. The idea is to catch students early before they need more intensive intervention, said Jeff Williams, a Reading Recovery Teacher-Leader in the Solon school district in Ohio.

Students read books they've read several times before, and then read a book



PROMPTING GUIDE, PART 1
Refer to page 13 as needed

Reading the Text

- As the children read, prompt for checking the information from the picture (e.g., hat) with the first letter of the word. For example: *What would make sense?* and *Does it look right?* or *What letter comes first in _____?*

continues on next page

In this sample lesson from Fountas & Pinnell's Leveled Literacy Intervention program, students are taught to use multiple sources of meaning while they read. One of the goals of this lesson is for students to "look carefully at words and use letter/sound information to solve them." But in the same lesson, teachers are also introducing strategies that ask students to take their eyes off of the words—like in this example, which asks students to use meaning cues. This lesson is at level A, the first level in LLI, often used with kindergarten students.

that they've only read once, the day before, while the teacher takes a "running record." Here, the teacher marks the words that the student reads incorrectly and notes which cue the child apparently used to produce the wrong word.

For example, if a child reads the word "pot" instead of "bucket," a teacher could indicate that the student was using meaning cues to figure out the word.

During the rest of the lesson, students practice letter-sound relationships, write a short story, and assemble words in a cut-up story. At the end, they read a new book.

The program also requires intensive teacher training, which is administered through partner colleges.

Fountas & Pinnell's Leveled Literacy Intervention follows a similar lesson structure, but it's delivered in a small group format rather than one-on-one.

In both programs, text is leveled according to perceived difficulty. Teachers are told to match students to books at a just-right level, with the idea that this will challenge but not overwhelm them.

Students in the lowest levels read predictable text: books in which the sentence structure is similar from page to page, and pictures present literal interpretations of what the text says. One LLI book, for example, follows a girl as she gets dressed to go sledding in winter. "Look at my pants," the first page reads, facing an image of the girl holding up a pair of pants. "Look at my jacket," is on the next page, with a photo of the girl pointing to a jacket.

Irene Fountas and Gay Su Pinnell, the founders of LLI, declined an interview for this story through their publisher, Heinemann. The company also declined to comment.

The main point of disagreement concerns these predictable texts and the teaching methods that align to them. For Williams, the Reading Recovery teacher leader in Ohio, predictable text can be a useful orienting tool when children are still learning how print works. The repetitive sentence structure demonstrates that words have consistent meaning, and the frequent pictures provide a context to link to the words, he said.

He gave the word "hippopotamus" as an example. By pointing out that "hippopotamus" starts with the letter "h," and linking that word to a relevant picture and story context, the student can connect the word and the meaning of the word.

"When it's in isolation and we just say arbitrarily, 'This shape makes this sound,' that's a little abstract for little kids," Williams said.

But other experts say using predictable text this way teaches young children the wrong understanding of how the English language works.

"You build this foundation of, English is a language that I have to memorize," said Tiffany Peltier, a doctoral student at Oklahoma University, who studies reading instruction.

But kids don't memorize words to learn them. Instead, they decode the letter-sound correspondences. After several exposures, the word becomes recognizable on sight, through a process called orthographic mapping.

Of course, a picture of a hippopotamus can convey useful information. It could help a child understand what the animal looks like, or what it might do in the wild. But a picture of a hippo won't help the child read the word.

In predictable texts, students don't have to recognize the individual sounds in the word, said Peltier, even though learning how to do that is highly correlated with reading ability. So do Reading Recovery and LLI attend to the sounds in words at all?

Both have daily sections for letter and word work. Reading Recovery tests students on 50 phonemes when they enter the program, and teachers target the ones that students don't know, said Williams.

But basing instruction around individual student errors—rather than progressing through a systematic structure—can leave some gaps, said Kristen Koeller, the educator outreach manager at Decoding Dyslexia California, who used to be a Reading Recovery teacher.

For example, she said, she might have a student who didn't know the /ow/ sound, like in the words "how" or "wow." Koeller would work with the student on that sound, but she wasn't expected to explain the difference between when "ow" makes the /ow/ sound, like in "how," and when "ow" makes an /o/ sound, like in "show."

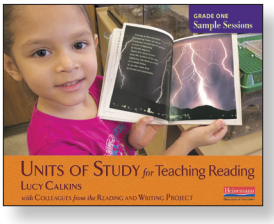
Phonics does happen in Reading Recovery lessons, she said. "But it is not systematic, it is not multisensory, and it depends largely on the teacher's knowledge base and the book that is selected."

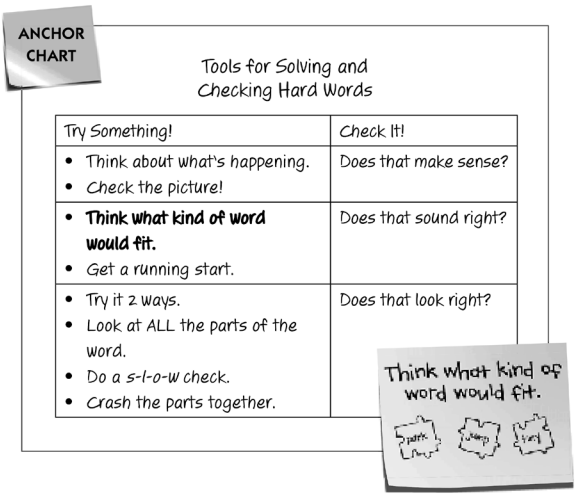
LLI does include a scope and sequence for phonemic awareness and phonics instruction. But students enter the program at different points, and it's possible that they might need more practice with skills that are deemed below their level—or that they will exit the intervention before they reach all of the sound-letter correspondences that they don't know.

The company, Fountas & Pinnell Literacy, identifies two main studies that it claims validate the program's effectiveness in grades K-2. Both are from the Center for Research in Educational Policy at the University of Memphis, and both were funded by Heinemann, which publishes LLI.

The 2010 paper, which the company calls its "gold standard" study, found that kindergarten, 1st, and 2nd graders who received LLI made greater gains than students who received no intervention. But these gains were only consistent on Fountas & Pinnell's own assessment, rather than an external validator of reading achievement. Results on DIBELS, a separate early literacy test, were mixed. Kindergartners and 1st graders in the treatment group did better than the control group on some subtests, but 2nd graders saw no difference.

Reading Recovery, by contrast, has a much stronger evidence base for effec-





This strategies chart for figuring out tricky words is from a 1st grade sample lesson in the Units of Study for Teaching Reading. Some strategies encourage students to decode: Instructions like, "Look at ALL the parts of the word," ask students to pay attention to specific letter/sound correspondences. Other strategies, like, "Think what kind of word would fit," ask students to guess at words based on context.

tiveness. Most notably, an independent evaluation of the federal grant expanding the program found that students who received the intervention did better on assessments of overall reading, reading comprehension, and decoding compared to similar students who received their schools' traditional literacy interventions. But even that study has invited controversy.

Psychologists James W. Chapman and William E. Tunmer published a critique of the evaluation, arguing that many of the lowest-achieving students were excluded from the program, potentially inflating success rates.

The executive director of the Reading Recovery Council of North America did not respond to requests for comment.

Three core instructional programs also made the top five most popular list among teachers, according to the *Education Week* survey: The Units of Study for Teaching Reading, by Heinemann, and Journeys and Into Reading, both by Houghton Mifflin Harcourt.

Units of Study for Teaching Reading was developed by Lucy Calkins, a researcher and the founding director of the Teachers College Reading and Writing Project.

The program follows a "reader's workshop" model. Teachers give a short "mini-lesson" at the beginning of class, and then students spend the majority of time practicing that skill independently as the teacher monitors them and works with small groups.

"We think about what is it that a good reader does. What is the life that a good reader leads?" Calkins says in a video describing reading workshop on the Units of Study website. "So above all, that means putting reading front and center."

Calkins declined an interview for this story through her publisher, Heinemann. The company also declined to comment on the program itself.

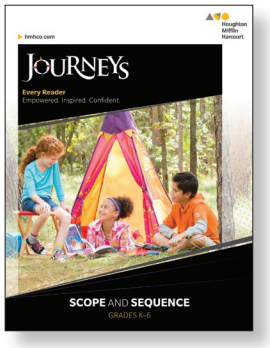
Units of Study instills these reading habits in children, and teaches them that reading is something to value, said Susan Chambre, an assistant professor of education at Marist College in Poughkeepsie, N.Y. It also introduces a variety of genres and gives students choice in what they read. "The fact that we are immersing kids in literature—that is important," Chambre said.

But Chambre struggled with Units of Study when she used it as a kindergarten teacher in an inclusion classroom. The program assumed a lot of knowledge—of oral language, of phonics—that students just didn't have. Chambre would watch children mumble through sentences, making up words by looking at the pictures.

"For those kids who come in [to school] and can learn foundational skills easily, and have a fair amount of general knowledge and a fair amount of vocabulary, they would come out okay," Meredith Liben, the senior fellow for strategic initiatives at Student Achievement Partners, said of the Units of Study for Teaching Reading.

But a lot of students don't come into school with that knowledge, and the program isn't explicit enough to fill in the gaps, Chambre said. Starting in kindergarten, students are taught reading "super powers" that encourage them to "search for meaning, use picture clues, and use the sound of the first letter of a word to help them read," according to kindergarten sample lessons downloaded from the Heinemann website. One sample lesson encourages teachers to say things like "Check the picture," "Try something," or "Does that look right?" when students struggle, which prompts students to take their eyes off of the letters in a word.

In a public statement responding to science-based critiques of her program,



This section of a scope and sequence chart from Houghton Mifflin Harcourt's Journeys reading program lists the skills to teach during kindergarten lessons. The company says that teachers can choose from a variety of materials and have the flexibility to make different instructional decisions.

Lesson	Selections	Text-Based Comprehension	Phonological Awareness/Phonics	Conc Hig
6	**Read Aloud Book** Listen, Listen **Genre:** Informational Text **Big Book** My Five Senses **Genre:** Informational Text **Paired Selections** "Picnic Day" "Here Are My Eyes" "The Storm" "Five Wonderful Senses" **Genre:** Poetry	**Target Skill** Compare and Contrast **Target Strategy** Monitor/Clarify **Supporting Skills** Text and Graphic Features	**Phonological Awareness** Blend Onset and Rime **Phonics** Letters *Aa* (Short *a*) Vowels and Consonants **Student Book** Aa I See	Conc Book Read Word Freq *see* Flue Paus
7	**Read Aloud Book** Amelia's Show-and-Tell Fiesta **Genre:** Realistic Fiction **Big Book** Mice Squeak, We Speak **Genre:** Realistic Fiction **Paired Selection** "The Fort Worth Zoo" **Genre:** Informational Text	**Target Skill** Understanding Characters **Target Strategy** Analyze/Evaluate **Supporting Skills** Author's Word Choice	**Phonological Awareness** Blend Onset and Rime Segment Onset and Rime **Phonics** Letters *Tt* Short *a*, Long *a* **Student Book** Tt We Like Toys	Conc Punc Q Ex Word Freq *we* Flue Read

Calkins wrote that asking students to guess or "try it" when they come to hard words teaches reading stamina. She also argued that there is value in predictable texts for young children, who are "approximating reading" when they rely on syntax and picture clues.

Though billed as a core reading program, the Units of Study in Reading doesn't teach phonemic awareness or phonics systematically or explicitly. "At best it's a suggestion, and there's a lot of focus on the three-cueing system," Liben said.

The Teachers College Reading and Writing Project recently released a separate phonics program, the Units of Study in Phonics. In her recent statement, Calkins emphasized the importance of a systematic phonics program, and said it would be a "wise move" for teachers to include more decodable texts in lessons with emerging readers. Still, marketing materials for the units imply that the company believes phonics should not play a central role in the classroom.

"Phonics instruction needs to be lean and efficient," the materials read. "Every minute you spend teaching phonics (or preparing phonics materials to use in your lessons) is less time spent teaching other things."

Menu of Choices

The other two core instructional programs, Houghton Mifflin Harcourt's Journeys and Into Reading, differ in some significant ways from the rest of this list. Into Reading is the company's newer product—this is its first academic year in schools. According to HMH, more than 6.7 million students use Journeys in school.

Both programs include an explicit, systematic program in phonemic awareness and phonics. In an emailed statement to *Education Week*, a representative for HMH wrote that the company suggests teachers follow this sequence, as phonics skills build cumulatively. Decodable texts are available for purchase.

Because these programs are meant to be comprehensive, they include lessons and resources for teaching other foundational skills—like writing letters, spelling, and fluency—as well as explicit vocabulary instruction, anchor texts and student texts, writing instruction, and comprehension instruction.

Seidenberg, who has reviewed the Journeys materials but not Into Reading, said that the amount of materials, lessons, and instructional choices in the program was overwhelming. "It looks like the publisher's response to all the debate about reading instruction was to make sure that they included everything," he said.

In the emailed statement, HMH said that teachers can "choose from a variety of resources to make the best instructional decisions for their students and to align with district curriculum requirements."

When Milton Terrace Elementary in Ballston Spa, N.Y., started using Journeys, teachers were using the materials differently, said Kathleen Chaucer, the principal. (The school is no longer using the program.) For example—even though the program offers decodable books, kids were practicing in leveled texts, which didn't offer opportunities to use patterns they learned, Chaucer said.

Journeys includes six teacher manuals for its 1st grade program alone, Seidenberg said. "There is so much information in those teacher manuals, it raises serious questions about whether anyone is actually using them," he said. "And if they are using them, are they just picking through them to find the pieces that they're comfortable with?" Chaucer said that's what happened at her school.

A Perfect Program?

It's hard to find a perfect curriculum, said Blythe Wood, an instructional coach in the special education department at the Pickerington school district, and the vice president of the International Dyslexia Association of Central Ohio.

She's critical of Leveled Literacy Intervention, specifically, for the focus it puts on looking at words as wholes, and the lack of decodable text. But there are good and bad parts to most commercial materials, she said.

"The knowledge base of the teacher, and being able to identify the needs of the student, are more important than a boxed program," Wood said. "We're not going to meet every kid with one box."

Taking a hard look at curriculum is important—but more important is making sure teachers have the training they need to evaluate practices themselves, said Beverine-Curry, of The Reading League. "Just handing teachers materials or a program or a curriculum is not going to do the job." ■

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RTI May Fall Short in Flagging Certain Students

Learning disabilities reported as soft spot

By Christina A. Samuels

As a method of organizing efforts to help students who are struggling academically, response to intervention has seen widespread adoption. But as an improved method of identifying students with learning disabilities, RTI shows far less clear benefits, researchers are finding.

The RTI instructional model is designed to identify students in need of extra assistance and provide them targeted and research-based lessons, or interventions. In the 2004 Individuals with Disabilities Education Act, Congress said that school districts were permitted to use a student's response to such interventions as part of an evaluation process for specific learning disabilities, the largest disability category.

But the federal government declined to tell districts and states exactly how such a process should work, saying that was the role of local educators to determine. And states have also tended to

take a hands-off approach at giving directives to individual districts.

The result, according to surveys of district and state special education leaders being highlighted this week: a wide variation across districts on several important issues, such as when parents are notified that their children are receiving intensive services through an RTI model, how long a student must receive interventions before being referred for a comprehensive evaluation, and whether any data are reported to the state so that officials can spot potential areas of concern.

"The problem is the variability in trying to get schools and districts, and districts and states, in communication with each other," said Tina M. Hudson, an assistant professor of special education at East Tennessee State University and one of the researchers who conducted the survey of state and district-level special education administrators. "We need more of a unified approach to this."

Robert G. McKenzie, a professor of special education at the University of Kentucky, is a co-author on the work. The two are scheduled to present their findings at the Learning Disabilities Association of America convention this week.

Lack of Policies

Fifty-eight percent of special education district leaders reported to Hudson and McKenzie that their school system had a policy or recommended practice on how long students could spend in a RTI model before being referred for a comprehensive evaluation or deemed to need special education. But the policies and practices varied widely. Districts reported that students spent on average 50 school days receiving interventions before the next step in determining their eligibility for special education. One outlier district reported that students could spend 150 school days, or almost an entire school year, receiving interventions before further evaluation. Another district required only 10 school days.

Of 31 special education state directors who responded to a survey from the researchers, 29 said that the state had no policy or recommended practice to guide districts on how long students could receive interventions before being referred for a comprehensive evaluation.

The paper focusing on the responses from state special education officials was published in the March 2016 issue of *Contemporary School Psychology*. A second report, which included responses from district-level officials, was published in the December 2016 issue of *Learning Disabilities: A Multidisciplinary Journal*.

Response-to-intervention models may differ in form among schools, but they contain some common features: universal screening tools that allow teachers to accurately determine which students need extra help; evidence-based interventions; multiple "tiers" of intervention intensity; and monitoring of progress, so that teachers have data on how well a student is responding to the extra help.

Intentionally missing from that process: a need for an official special education label before receiving services. That was seen as an improvement from other methods of identifying learning disabilities, such as giving students IQ tests to see if their intelligence was significantly different from their scores on achievement tests.

The "IQ achievement discrepancy" model was criticized by many as requiring students to fail for a long time before getting access to specialized services. One of the most influential criticisms came from the President's Commission on Excellence in Special Education, which was convened by President George W. Bush and released its findings in 2002.

Adopting New Procedures

When the IDEA was reauthorized two years later, Congress adopted many of the commission's recommendations, including permitting RTI as an evaluation method.

But observers warned of some potential problems during the public-comment period for regulations to support the new law. Without some sort of guidance from the Education Department, those commenters said, special education identification might take a long time and run afoul of the IDEA's "child find" requirement that all children with disabilities be identified, located, and evaluated.

There also appears to be little way to judge if including RTI procedures as part of an evaluation process is an improvement from other methods. Twenty-six of 30 special education directors who responded to the question (one director did not answer) said their states had no prescribed system for evaluating the effectiveness of RTI.

"[RTI] is being implemented, but not tracked in terms of the desired benefits it was supposed to achieve," McKenzie said. "There is the potential to really delay identification without some degree of governance and oversight, even if it's at the local level."

Federal Guidance

In the years since the IDEA was reauthorized, the Education Department has addressed some of the concerns. In guidance released in 2011, the department said that RTI strategies could not be used to delay or deny an initial evaluation for learning disabilities. It followed that up with similar guidance in 2016, singling out preschoolers referred to districts for evaluation.

The Every Student Succeeds Act does not include language about response to intervention specifically, but it does contain a brief mention of "multitiered systems of supports," a term that encompasses RTI. The new law says multitiered systems can be used to help students with disabilities and English-language learners access challenging academic standards.

That RTI has led to potential unintended consequences for students with disabilities is not a surprise to attorneys who represent both school districts and parents of children with disabilities.

Allison Hertog, a Florida-based parent attorney and former special education teacher, said from her perspective, RTI is used as a "legally persuasive" way to avoid child find. "Some parents are told, 'We don't do comprehensive evaluations any more,'" she said.

Jose Martín, who works in Austin and has represented school districts in special education matters, said he's warned districts about following such strict RTI processes that they might end up losing a legal battle. For example, in one unusual 2011 case that the school system ended up losing, an Ohio district tried to require a student with diabetes to go through RTI before receiving accommodations.

Keeping the process flexible means that districts should work in partnership with parents, Martín said. He said that districts also need to develop a set of general principles for practice.

"How much response is necessary to comfortably say a child is not [learning-disabled]? It's completely unclear. I haven't seen state policy that defines that in any meaningful way," he said. "It's crucial that [districts] adopt a guideline for what 'response' means that is defensible in court." ■

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Published December 14, 2016, in Education Week

What Are Multitiered Systems of Supports?

By Christina A. Samuels

Response to intervention, multitiered systems of supports, positive behavioral supports and interventions.

Proponents of an educational framework aimed at systematically supporting struggling students throw around those terms all the time, but what do they really mean? This glossary helps cut through the fog.

What is response to intervention?

Response to intervention is an instructional framework that focuses on addressing problems early with students who show signs of academic weakness. Among its essential components: high-quality education for all students; universal screening so that teachers can spot children who are struggling; targeted, research-based "interventions" of increasing intensity designed to help students improve in problem areas; frequent progress monitoring so that teachers can see how well students are responding to the targeted interventions, and data-based decisionmaking based on the information gathered from that monitoring.

Where did response to intervention come from?

The elements that make up what we call response to intervention have been around for decades, but the term first showed up in federal law in 2004, when the Individuals with Disabilities Education Act was last reauthorized. In the special education law, the RTI process was put forward as an alternative method of identifying students with learning disabilities. Congress' intent was to make sure that students diagnosed with disabilities weren't just the victims of poor teaching.

Over the years, the educational framework has grown beyond the special education field. It is now seen as a method of improving instruction and academic results for all students.

— Getty

What are multitiered systems of supports?

Districts differ in how they use this term. Some use RTI and MTSS as synonyms, for example. But usually, "multitiered systems of supports" is used as an umbrella term that encompasses both response to intervention and positive behavioral interventions and supports. Schools implementing MTSS are usually trying to tackle both behavioral and academic concerns at the same time, recognizing that they often go hand in hand: A student who can't understand what's going on in the classroom is more likely to act out, and a student who is grappling with behavior problems is not going to be able to focus on academics.

What are the "tiers" in RTI?

Response to intervention is generally conceptualized as different levels of instruction. Tier 1 is the strong instruction that every student in a school should be receiving. Tier 2 includes students who are receiving extra academic support, often provided in small groups. Tier 3 is for students who have severe or persistent needs who require individualized help.

RTI proponents have said that movement among those tiers should be fluid: A student with acute needs doesn't need to progress through the tiers to get individualized support, for example. And a student who needs some extra support should not miss out on the general instruction that is provided on Tier 1.

What are positive behavioral interventions and supports?

PBIS predates RTI in its inclusion in federal law; it was first introduced in the 1997 reauthorization of the IDEA as a research-based framework for supporting children with behavior disorders. As with RTI, PBIS operates on tiers. All students are taught certain behavioral expectations and rewarded for following them, and students with more needs are provided increasingly intensive interventions.

How are schools using RTI and PBIS?

School districts have largely adopted the multitiered framework as a schoolwide improvement process because of its focus on screening all children, improving overall instruction, and making decisions based on data. RTI has a stronger research base for early reading, however. District leaders say that setting up a multitiered framework for older children and in different subject areas has been more challenging because there are fewer research-based interventions in those areas and because it becomes more challenging with older students to create time for interventions during the school day.

What does the Every Student Succeeds Act say about MTSS?

The text of the law mentions multitiered systems of supports only briefly, in the context of helping students with disabilities and English-language learners access challenging academic standards. State leaders may choose to use multitiered frameworks as a way to organize school improvement efforts in the improvement plans they must submit to the U.S. Department of Education next year. ■

Published December 14, 2016, in Education Week

MTSS: Where the Obstacles Are

By Sarah D. Sparks

A multitiered system of supports for students is a model with a lot of moving parts and cooperation needed at every level, from the classroom to the state education agency. As a study of Michigan's statewide MTSS initiative found, "initial implementation is fragile, and sustained support must be provided to expect sustained implementation."

Problems can arise at any level of the system, from the core instruction for all students at Tier 1, to Tier 2 interventions for students falling behind, to the intensive services provided for students at Tier 3. Here's how Ingham Intermediate school district—a regional agency serving 12 local districts and 10 charter schools—broke out the costs and common challenges at every phase of its multitiered system of supports model for academic and behavioral improvement.

Shared Leadership

What it is: Building consensus among critical leaders and staff members and setting up infrastructure to begin a multitiered system of supports in a new school.
Annual cost per student: $1.59 for the first three years; no ongoing cost.
Challenges: Ingham won early buy-in from school and district leaders for its mutltitiered-supports initiative in 2009 with $11 million in start-up funding from the federal stimulus package. But principal and superintendent turnover has led to uneven support from school to school and district to district. Districts have suspended implementation for a few years at a time when leaders were not interested or did not understand the model.

Universal Screening

What it is: Assessing all students' academic and behavioral status, both initially and at regular times during the school year. This includes literacy and math screening for all students in K-8 and for 9-12 students previously identified as at risk of falling behind academically, as well as behavior evaluations for all K-12 students.
Annual cost per student: $7.50 for the first three years; $7.75 ongoing.
Challenges: Setup includes both the buying the tests themselves and training teachers and staff to use them, and in Ingham, training and winning buy-in from staff was the bigger hurdle. "Screening was a battle in the beginning," said Laura Colligan, Ingham's supervisor for student instructional services. "People were worried we would be tracking kids. You always heard one horror story of [someone who heard] some child was put in a special [education] program based on" one assessment screener.

Progress Monitoring

What it is: Using formative assessments, observations, and other data to track students' progress and gauge whether a particular intervention is helping them.
Annual cost per student: $5.50 for the first three years; 55 cents ongoing.
Challenges: "We had to look at how we used our personnel resources," said Lisa Francisco, the principal of Alaiedon Elementary School in the Mason, Mich., school district (part of Ingham). "We use paraprofessionals a lot more instructionally than they were before, in progress monitoring. They needed training. We brought them into planning. ... They are very stressed right now, but they are far more valuable there."

Monitoring individual students has also led to tough conversations about teachers' expectations for particular groups of students. "Sometimes, there were kids who were not put in Tier 3," as teachers requested, "because the teachers had not shown that they were really accessing the [Tier 1] core curriculum," said Pamela Westfall, an interventionist at Elliott Elementary School, part of the Holt public school system.

Data-Based Decisionmaking and Problem-Solving

What it is: Collecting, analyzing, and summarizing students' data, alone or in a group, to answer questions and match students with appropriate instruction and interventions.
Annual cost per student: $9.60 for the first three years; 96 cents ongoing.
Challenges: "One of our mistakes was just bringing together data on everything," said Helen McNamara, Ingham's assistant superintendent for budget and financing. "It was too much data; people got overwhelmed, and we never really had time to say what is the 'so what?' of this data. Now, [school] teams meet and talk about one or two things. You have math, reading, behavior: Just focus on your weakest area and start unpacking that."

Research-Based Instruction, Intervention, and Practices

What it is: Using programs and practices—in core instruction and for interventions—that have reliable scientific evidence of being effective with the students who are using them.
Annual cost per student: The core curriculum cost $100-$120 for reading and $85-$100 for math. Interventions ranged considerably, from $12 to $710.
Challenges: Ingham got some pushback against uniform curricula: "Many of our districts had no core reading curriculum when we started, and only one had a research-based one," McNamara said. "Now, 11 out of 12 do."

Ingham also constantly works to provide a big enough pool of evidence-based interventions for every subject and grade level, with high school interventions particularly scarce.

Student and Family Involvement

What it is: Providing online and in-person training for parents to understand the multitiered system and to support and monitor their students' progress at home.
Annual cost per student: $3.63 for the first three years; no ongoing costs.
Challenges: "You have to make sure you have a lot of consensus, but we didn't get a lot of training on how you build that consensus," Francisco said. "How do you hear the voices of the naysayers, help them know they've been heard and yet that we are still moving forward?" ■

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How Do Kids Learn to Read? What the Science Says

By Sarah Schwartz and Sarah D. Sparks

How do children learn to read? For almost a century, researchers have argued over the question. Most of the disagreement has centered on the very beginning stages of the reading process, when young children are first starting to figure out how to decipher words on a page.

One theory is that reading is a natural process, like learning to speak. If teachers and parents surround children with good books, this theory goes, kids will pick up reading on their own. Another idea suggests that reading is a series of strategic guesses based on context, and that kids should be taught these guessing strategies.

But research has shown that reading is not a natural process, and it's not a guessing game. Written language is a code. Certain combinations of letters predictably represent certain sounds. And for the last few decades, the research has been clear: Teaching young kids how to crack the code—teaching systematic phonics—is the most reliable way to make sure that they learn how to read words.

Of course, there is more to reading than seeing a word on a page and pronouncing it out loud. As such, there is more to teaching reading than just teaching phonics. Reading requires children to make meaning out of print. They need to know the different sounds in spoken language and be able to connect those sounds to written letters in order to decipher words. They need deep background and vocabulary knowledge so that they understand the words they read. Eventually, they need to be able to recognize most words automatically and read connected text fluently, attending to grammar, punctuation, and sentence structure.

But knowing how to decode is an essential step in becoming a reader. If children can't decipher the precise words on the page, they'll never become fluent readers or understand the passages they're reading.

That's why we've put together this overview of the research on early reading, in grades K-2. It covers what's known about how we should teach letter-sound patterns, and what we don't know for sure yet. It touches on what else should be part of early reading programs. And it explains why we know that most children can't learn to read through osmosis or guessing.

Here's what the evidence shows.

Don't children learn to read the way they learn to speak?

Infants learn to speak by listening to and repeating sounds made by adults and connecting them to meanings. They don't consciously distinguish individual sound units (called phonemes) when hearing spoken language. Some research suggests infants learn probabilistically—for example, hearing the sound "ball" at the same time as the sight of a round, bouncy object over time makes the child associate the two—while other studies suggest children map meaning to a word after experiencing it just once or twice. Within the first two years, typically developing toddlers' brains focus on the most common sounds in their native languages and connect those sounds to meaning. A child develops understanding of speech through exposure to language and opportunities to practice the "serve and return" patterns of conversation, even without explicit instruction.

By contrast, children do not naturally develop reading skill through exposure to text. The way they learn to connect oral and written language depends on what kind of language they are learning to read.

Alphabetic languages, like English or French, use letters to stand for sounds that make up spoken words. To read an alphabetic language, children must learn how written letters represent spoken sounds, recognize patterns of letter sounds as words, and match those to spoken words whose meanings they know. This differs from Chinese, for example. It uses a tonal spoken language, conveying meaning with small differences in stress or pitch. Its writing system is partially logographic— in which written symbols correspond directly to a word or concept—and also includes words that couple symbols for meaning and symbols for sound. Someone reading Chinese hanzi characters could not "sound out" unfamiliar words character by character.

What is systematic, explicit phonics instruction, and why is it important?

Connecting printed letters on a page to written sounds isn't intuitive. While some young children may make those connections themselves, most do not. One set of studies from 1989-90 illustrates this phenomenon well.

In these studies, conducted by Brian Byrne and Ruth Fielding-Barnsley, researchers taught young children between ages 3 and 5 to read whole words aloud, like "fat" and "bat." These children didn't already know their letter names.

Then, the researchers tested whether the children could transfer their knowledge to reading a new word. They gave them the word "fun," and asked whether the word was "fun" or "bun." Very few of the students could do this successfully. They couldn't break down the original word into phonemes and then transfer their knowledge of those phonemes to a new word.

But children could succeed on this task if they were first given some explicit instructions. When children were taught how to recognize that certain letters represented certain sounds, and taught how to segment words to identify those individual letters and sounds, they had much greater success on the original transfer test. Neuroscience research has since confirmed and helped explain these findings. When learning how to read new words in an unfamiliar made-up language, participants had more long-term success if they were first taught which symbols correspond to which sounds, than if they tried to remember words as wholes. Brain imaging of these readers finds that the two teaching strategies tap into different neural pathways in the brain. Readers taught to connect print to meaning directly could

recall words initially more quickly, but less accurately; readers taught to connect print to sound and then to meaning read aloud more quickly and correctly, better recalled the correct meanings of words, and transferred their knowledge to new words.

Decades of research has shown that explicit phonics instruction benefits early readers, but particularly those who struggle to read.

That's because small strengths or deficits at the start of reading compound over time. It's what reading expert Keith Stanovich in 1986 dubbed the "Matthew Effect in Reading," after the Bible verse in which the rich get richer and the poor get poorer: "The combination of deficient decoding skills, lack of practice, and difficult materials results in unrewarding early reading experiences that lead to less involvement in reading-related activities," Stanovich wrote. "Lack of exposure and practice on the part of the less-skilled reader delays the development of automaticity and speed at the word recognition level. Slow, capacity-draining word-recognition processes require cognitive resources that should be allocated to comprehension. Thus, reading for meaning is hindered; unrewarding reading experiences multiply; and practice is avoided or merely tolerated without real cognitive involvement."

My reading curriculum includes letter-sound instruction. Am I providing enough phonics?

Not all phonics instruction is created equal.

The most effective phonics programs are those that are systematic. The National Reading Panel found this in 2000, and since then, further research reviews have confirmed that this type of instruction leads to the greatest gains in reading accuracy for young students.

A systematic phonics program teaches an ordered progression of letter-sound correspondences. Teachers don't only address the letter-sound connections that students stumble over. Instead, they address all of the combinations methodically, in a sequence, moving on to the next once students demonstrate mastery. Teachers explicitly tell students what sounds correspond to what letter patterns, rather than asking students to figure it out on their own or make guesses.

In one series of experiments, Stanford University neuroscientist Bruce McCandliss and his colleagues made up a new written language and taught three-letter words to students either by asking them to focus on letter sounds or on whole words. Later, the students took a reading test of both the words they were taught and new words in the made-up language, while an electroencephalograph monitored their brain activity. Those who had focused on letter sounds had more neural activity on the left side of the brain, which includes visual and language regions and is associated with more skilled reading. Those who had been taught to focus on whole words had more activity on the right side of the brain, which has been characteristically associated with adults and children who struggle with reading. Moreover, those who had learned letter sounds were better able to identify unfamiliar words.

—Graeme Sloan/Education Week

Second grade teacher Kim Kohlrus "taps out" words by syllable from the board as students follow along at their desks at Beverly Gardens Elementary School in Dayton, Ohio.

Early readers benefit from systematic phonics instruction. Among students in grades K-1, phonics instruction led to improvements in decoding ability and reading comprehension across the board, according to the National Reading Panel. Children at risk of developing future reading problems, children with disabilities, and children from all socio-economic backgrounds all benefited. Later research reviews have confirmed that systematic phonics instruction is effective for students with disabilities, and shown that it also works for English-language learners.

Most studies of phonics instruction test its immediate effectiveness—after the intervention, are children better readers? Among students in older grades, the results are less clear. A recent meta-anal-

ysis of the long-term effects of reading interventions looked at phonics and phonemic awareness training, mostly in studies with children in grades K-1. Both phonics and phonemic awareness interventions improved reading comprehension at an immediate post-test. But while the benefits of phonemic awareness interventions persisted in a follow-up test, the benefits of phonics interventions faded much more over time. The average length of all interventions included in the study was about 40 hours, and the follow-up assessments were conducted about a year after the interventions were complete, on average.

Some of my students didn't need phonics instruction to learn to read. Why are you saying that all kids benefit?

Depending on the estimate, anywhere from 1 percent to 7 percent of children figure out how to decode words on their own, without explicit instruction. They may spot the patterns in books read to them or print they see in their environment, and then they apply these patterns. These include children with a neurotypical form of "hyperlexia"—a condition in which children may begin decoding as early as 3— but this is more frequently associated with children who have autism-spectrum disorders and often have separate problems with reading comprehension.

It may seem like these children are reading words as whole units, or using guessing strategies to figure out what comes next in the story. But they are attending to all of the words' individual letters—they're just doing it very quickly.

A systematic phonics program can still benefit these students, who may have gaps in their knowledge of spelling patterns or words that they haven't encountered yet. Of course, phonics instruction—like all teaching—can and should be differentiated to meet the needs of individual students where they are. If a student can demonstrate mastery of a sound, there's no need to continue practicing that sound—he or she should move on to the next one.

There's another answer to this question: Students may look like they're decoding when they're actually not. For example, a child may see an illustration of an apple falling from a tree, and correctly guess that the sentence below the picture describes an apple falling from a tree. This isn't reading, and it doesn't give the teacher useful information about how a student will tackle a book without pictures.

Can cueing strategies help students to read?

Many early reading classrooms teach students strategies to identify a word by guessing with the help of context cues. Ken and Yetta Goodman of the University of Arizona developed a "three-cueing system," based on analysis of common errors (or "miscues") when students read aloud. Ken Goodman famously called reading development a "psycholinguistic guessing game," and cueing systems teach students to guess at a new word based on:

- Meaning/Semantics, or background knowledge and context, such as vocabulary a student has already learned;
- Structure/Syntax, or how the word fits in common grammar rules, such as whether the word's position in a sentence suggests it is a noun, verb, or adjective; and
- Visual/Graphophonics, or what a word looks like, such as how upper- and lowercase letters are used (suggesting a proper noun, for example) or common spelling patterns.

Cueing systems are a common strategy in whole-language programs, and also are used in many "balanced literacy" programs that incorporate phonics instruction. Cueing systems were designed by analyzing errors rather than practices of proficient readers, and have not shown benefits in controlled experiments.

Moreover, cognitive and neuroscience studies have found that guessing is a much less efficient way to identify a new word, and a mark of beginning or struggling readers, not proficient readers. Skilled readers instead sound out new words to decode them.

Balanced literacy programs often include both phonics and cueing, but studies suggest cueing instruction can make it more difficult for children to develop phonics skills because it takes their attention away from the letter sounds.

I know phonics instruction is supposed to be explicit and systematic. But beyond that, how should I teach it? Does the research say anything about what content I need to cover, and how should it be sequenced?

There is a general path that most children follow as they become skilled decoders. Research can tell us how children usually progress along this path, and which skills specifically predict better reading performance.

Before starting kindergarten, children generally develop some early phonological awareness—an understanding of the sounds that make up spoken language. They can rhyme, break down multi-syllable words, and recognize alliteration.

A next step in the process is understanding that graphemes—combinations of one or more letters—represent phonemes, the smallest units of spoken language. It's easier for students to learn these letter-sound correspondences if they already have early phonological skills like rhyming and alliteration, along with knowledge of the names of the letters of the alphabet.

And while vocabulary is important for reading comprehension, research has also found that it's a component in decoding ability. One study found that when children know a word's meaning, they can more quickly learn how to recognize it automatically, because the visual letters, corresponding sounds, and meaning all map together when a reader recognizes a word.

There are other early skills that relate to later reading and writing ability as well, regardless of IQ or socio-economic status. Among these are writing letters, remembering spoken information for a short time, rapidly naming sequences of random letters, numbers, or pictures, and other phonological skills—like the ability to segment words into phonemes.

To decode words, students need to be taught to blend together the phonemes that graphemes represent on the page. For example, a young reader must learn to recognize that /r/, /o/, /d/ are three sounds that together form the word "rod," but also that the word "rock" also contains three sounds, /r/, /o/, /k/ This is a process that builds on itself rapidly. Though there are some 15,000 syllables in English, after a child has learned the 44 most common sound and letter combinations, they will begin to sound out words as they read. These include both the basic letter and vowel sounds, but also common combinations such as "th," "sh," and "-ing." There are two main ways to demonstrate to children that words are made up of sound-letter correspondences. In one method, students learn the sounds of the letters first and then blend these phonemes together to sound out words. That's synthetic phonics—they're synthesizing phonemes into greater whole words. The other method, analytic phonics, takes an inverted approach: Students identify—or analyze—the phonemes within words, and then use that knowledge to read other words.

Take the word "bat." In synthetic pho-

nics, students would first learn the /b/ sound, then the /a/ sound, then the /t/ sound and blend them together to sound out "bat." In analytic phonics, students would learn the word "bat" alongside words like "cat," "mat," and "hat," and would be taught that all these words end in the "at" sound pattern.

So there's synthetic phonics and analytic phonics—is one way better than the other?

A few studies have found synthetic phonics to be more effective than analytic phonics. Most notably, a seven-year longitudinal study from Scotland found that synthetic phonics taught in 1st grade gave students an advantage in reading and spelling over analytic phonics. Still, when examined as a whole, the larger body of reading research doesn't surface a conclusive winner. Two landmark research reviews haven't found a significant difference in the effectiveness of the two methods. Other more recent research is still inconclusive.

Do these strategies apply to words that don't follow traditional sound-spelling patterns? What about words like "one" and "friend"—can those words still be taught with phonics?

Yes, but not alone; spelling and semantic rules go hand-in-hand with teaching letter sounds. Words like "lime" and "dime," have similar spelling and pronunciation. But some words with similar spelling have different pronunciations, like "pint" and "mint." And others have different spellings and similar pronunciations, like "jazz" and "has." Brain imaging studies find that when readers see word pairs that are inconsistent, they show greater activity in the areas of the brain associated with processing both visual spelling and spoken words. This shows that young readers use systems of understanding of both printed shapes and sounds when they see any written word. When those two systems conflict, the reader may call on additional rules, such as understanding that words at the end of lines of a rhyming poem (such as "has" and "jazz") likely rhyme even if their spelling would not suggest it.

Some research has found that teaching common irregular words, like "one" and "friend," as sight words can be effective. Still, in these studies, children were also taught phonics along with sight words—and that's important. Understanding phonics gives students the foundation to read these irregular words. Take "friend." While the "ie" doesn't produce the same sound it normally does, the other letters in the word do. Research has suggested that children use the "fr" and the "nd" as a framework when they remember how to read the irregular word "friend."

When should children start to learn how to sound out words? Is there a "too early"?

Even very young children can benefit from instruction designed to develop phonological awareness. The National Early Literacy Panel Report (2009), a meta-analysis of early literacy studies, found that teaching preschoolers and kindergartners how to distinguish the sounds in words, whether orally or in relationship to print, improved their reading and writing ability. The children in these studies were generally between the ages of 3 and 5.

Studies suggest progress in phonics is less closely linked to a child's age than to the size and complexity of his spoken vocabulary, and to his opportunities to practice and apply new phonics rules. There is some evidence that "decodable" books, designed to help students practice specific letter-sound combinations, can benefit the earliest readers. But it is mixed, and students very quickly progress enough to get more benefit from texts that provide more complex and irregular words—and often texts that students find more interesting.

How much time should teachers spend on teaching about letters and sounds in class?

There isn't yet a definitive "best" amount of time to spend on phonics instruction. In several meta-analyses, researchers haven't found a direct link between program length and effectiveness.

The National Reading Panel report found that programs focusing on phonemic awareness, the ability to hear, identify, and manipulate the smallest units of speech sounds, that lasted less than 20 hours total had the greatest effect on reading skills. Across the studies that the researchers looked at, individual sessions lasted 25 minutes on average.

But the authors of the NRP are quick to point out that these patterns are descriptive, not prescriptive. The studies they looked at weren't specifically testing the effectiveness of different time lengths, and it may be that time wasn't the relevant factor in these shorter programs performing better.

Eventually, a skilled reader doesn't need to sound out every word that she reads. She sees the word and recognizes it immediately. Through reading the word again and again over time, her brain has linked this particular sequence to this word, through a process called orthographic mapping.

But neuroscience research has shown that even if it feels like she's recognizing the word as a whole, she's still attending to the sequence of individual letters in the word for an incredibly short period of time. That's how skilled readers can tell the difference between the words "accent" and "ascent."

What else—aside from phonics—is part of a research-based early reading program?

Phonics is essential to a research-based reading program. If students can't decode words, they can't derive any meaning from them. But understanding the alphabetic code doesn't automatically make students good readers. There are five essential components of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension.

The National Reading Panel addressed all five of these components. The researchers found that having students read out loud with guidance and feedback improved reading fluency. Vocabulary instruction, both explicit and implicit, led to better reading comprehension—and it was most effective when students had multiple opportunities to see and use new words in context. They also found that teaching comprehension strategies can also lead to gains in reading achievement, though most of these studies were done with students older than 2nd grade.

For younger students, oral language skills; understanding syntax, grammar,

Connecting printed letters on a page to sounds isn't intuitive. While some young children may make those connections themselves, most do not.

Guided by the Big Five, Educators Build Better Readers

How one principal boosted reading success by tapping research-based practices

When educators at Jefferson Elementary School in Jerome, Idaho, wanted to improve overall reading success for students in kindergarten to 3rd grade, they decided to focus on Istation data provided for one component of the Big Five: vocabulary.

> In just one school year, all four grades saw significant improvement in vocabulary scores.

Teachers started by running a baseline assessment of vocabulary skills using Istation's Indicators of Progress and then came together for weekly meetings to determine how to best address low vocabulary scores. Tapping research-based practices driven by data from the Istation platform, the teachers designed intervention lessons.

The percentage of 1st graders who were considered proficient in vocabulary grew from 28% to 48% from the beginning to the end of the school year. Proficient 2nd graders rose from 43% to 65%, 3rd graders from 45% to 58% and kindergartners from 20% to 43%.

"Focusing on improving vocabulary proficiency scores schoolwide was important to the whole staff, and their collaboration around routines and strategies made a big difference for our students," said Angie Brulotte, principal of Jefferson Elementary School.

vocabulary, and idioms; and having general and topic-specific background knowledge are also essential for reading comprehension.

This is one of the premises of the Simple View of Reading, a framework to understand reading first proposed by researchers Philip B. Gough and William E. Tunmer in 1986. In the simple view, reading comprehension is the product of decoding ability and language comprehension. If a student can't decode, it doesn't matter how much background knowledge and vocabulary he understands—he won't be able to understand what's on the page. But the opposite is also true: If a student can decode but doesn't have a deep enough understanding of oral language, he won't be able to understand the words he can say out loud. Since Gough and Tunmer first proposed this framework, many studies have confirmed its basic structure—that comprehension and decoding are separate processes. One meta-analysis of reading intervention studies finds that phonics-focused interventions were most effective through grade 1; in older grades—when most students will have mastered phonics—interventions that targeted comprehension or a mix of reading skills showed bigger effects on students' reading skills.

For young students, early oral-language interventions can help set them up for success even before they start formal school.

The National Early Literacy Panel found that both reading books to young children and engaging in activities aimed at improving their language development improved their oral language skills.

If children don't learn to read naturally from being exposed to reading, why are parents and teachers encouraged to read to infants and preschoolers?

The amount of time adults read with preschoolers and young children does predict their reading skills in elementary school. One of the most important predictors of how well a child will learn to read is the size and quality of his spoken language and vocabulary, and children are more likely to be exposed to new words and their meanings or pick up grammar rules from reading aloud with adults.

In a series of studies in the late 1990s of 5-year-olds who had not yet learned to read, Victoria Purcell-Gates found that after controlling for the income and education level of the children's parents, children who had been read to regularly in the last two years used more "literary" language, longer phrases, and more sophisticated sentence structures. Moreover, an adult reading with a child is more likely to explain or expand on the meanings of words and concepts that the child does not already know, adding to their background knowledge.

Reading with trusted adults also helps children develop a love of reading. "The association between hearing written language and feeling loved provides the best foundation for this long process [of emergent literacy], and no cognitive scientist or educational researcher could have designed a better one," notes cognitive neuroscientist Maryanne Wolf.

—Graeme Sloan/Education Week

Lylian Burdick and Jonathan Bland, 2nd graders at Beverly Gardens Elementary School in Dayton, Ohio, practice reading out loud early in the day's lesson.

What about independent choice reading?

In a choice reading period—also known as sustained silent reading or Drop Everything and Read—students get to pick a book to read independently in class for a set amount of time. The premise behind this activity is that children need time to practice reading skills on their own to improve.

There is a lot of correlational research that shows that children who read more are better readers. But many of these studies don't quantify how much reading students are actually doing. While they may specify a time frame—15 minutes of sustained silent reading, for example—the studies don't report whether kids spend this time reading. That makes it difficult to know how effective choice reading actually is.

More importantly, these studies don't provide experimental evidence—it's not clear whether reading more is what makes students better readers, or if better readers are likely to read more. The National Reading Panel found that there wasn't evidence that choice reading improved students' fluency.

Does it make a difference whether children learn to read using printed books or digital ones?

In the last decade or so, access to Internet-based text has continued to expand, and schools have increasingly used digitally based books, particularly to support students who do not have easy access to paper books at home. Yet some emerging evidence suggests children learn to read differently in print versus digitally, in ways that could hinder their later comprehension.

Researchers that study eye movements find that those reading digital text are more likely to skim or read nonlinearly, looking for key words to give the gist, jump to the end to find conclusions or takeaways, and only sometimes go back to find context in the rest of the text. In a separate series of studies since 2015, researchers led by Anne Mangen found that students who read short stories and especially longer texts in a print format were better able to remember the plot and sequence of events than those who read the same text on a screen.

It's not yet clear how universal these changes are, but teachers may want to keep watch on how well their students reading electronically are developing deeper reading and comprehension skills. ■

COMMENTARY

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Student Trauma Is Real. But Connection Can Heal.

By Gary G. Abud, Jr.

Can...can you...can you hear me now?

As humans, we are hard-wired for connection with each other. When we face challenging life situations, we often seek out and lean on others. Relationships are our human cell phone signals. In *The Power of the Other*, Dr. Henry Cloud compares our strong desire to develop meaningful relationships to how a cell phone constantly seeks connection in order to function.

Like a phone after powering up, people begin to seek connection as soon as they enter the world, and they never stop.

There are many factors that can interfere with connectivity; and if our signal gets disrupted, we relocate until a good connection can be restored. When we establish a strong connection with others, we want to maintain it, but we don't always have a 4G LTE network of relationships. Just as dead zones can disrupt cell signals, there are myriad factors, including trauma, that can disrupt our personal connections with others and limit our functioning.

The Reality of Trauma

Traumatic events, such as war, death, or violence can have a serious influence on one's health, stress, and anxiety; for kids, this is especially true, as they lack the social and emotional skills to deal with the impact of trauma. Trauma can even cause physical pain, including when a traumatic event is non-physical. In recent years, the Center for Disease Control and Prevention has helped to expand what qualifies as trauma to include more social and emotional events, such as poverty, divorce, and food insecurity.

When kids are exposed to Adverse Childhood Experiences (ACEs) like abuse, neglect, or household dysfunction earlier in life, there is a larger risk for negative impacts on learning, health, and wellbeing in later years. That is because both emotional and social pain as well as physical pain are neurological.

Pain is more than a metaphor, as UCLA Neuroscientist Matthew Lieberman found in his research. Social separation in infants causes pain and triggers a physical response. Acetaminophen has been shown to alleviate the pain of a broken heart just like it can ameliorate back pain. Years after a traumatic event, one is more likely to remember the pain associated with a lost loved one than the pain of a broken arm. And, like Cloud, Liberman also acknowledges that connection with others is among our greatest human needs.

Trauma, ACEs, Empathy, and Learning

ACEs have more than an emotional impact on children, they change the brain, affecting memory, cognition, and learning capacity. Some children born during the Great Recession have been found to have deficiencies in nutrients that are key to cognitive development and mental health—such as folate, choline, and omega-3 fatty acids—as a result of poverty, food insecurity, and parents' inability to purchase costlier whole foods. Stanford psychologist Hilit Kletter points out that this might lead kids to act out, exhibit big emotions, or struggle with impulsivity in school, which gets them in trouble or is mistaken for ADHD.

For many who experienced financial struggles and other ACEs in the past decade, there was a high level of shame. The shame associated with social and emotional pain breaks down connection with others and isolates us from each other. Brene Brown's model of interpersonal connection spans a continuum, ranging from empathy (most connected) to shame (least connected). According to her shame-resilience curriculum, vulnerability is the key to helping us connect, which in turn yields empathy, and can overcome the destructive impact of shame. So understanding and empathy from a caring adult can help contextualize symptoms of trauma as maladaptive behaviors, not misconduct.

In order for students to be receptive to new learning, there needs to be a supportive ecosystem around social and emotional development in schools, which includes awareness among educators, a trauma-informed MTSS, and a school-wide social emotional learning curriculum taught by teachers, like the Second Step Program. Researcher Chuck Saufler explains that this type of network of structure and support to kids, founded on authentic, trusting connections, changes the brain in a positive way. It decreases the stress response in the

body, removing cognitive inhibitors, and creates a climate of relaxed alertness in the brain, leading to better learning.

Students who have strong connections in school perform better, because relationships are central to learning and development, since they create a sense of doing school with, rather than doing school to, kids. That's why forming strong connections with students between educators and the classroom environment, is crucial. This yields relational literacy among students, too, and it all begins with adults who develop understanding and empathy for the students in the context of trauma.

Connection Is the First Step

During a time when many students have experienced some form of trauma, even a single nurturing personal connection can work to reverse the negative aspects of trauma for a child. According to a recent report by the National Network of State Teachers of the Year, this is because that personal connection engenders in students a sense of belonging at school, especially students in poverty. Moreover, the report notes that teachers play a key role in fostering social and emotional competencies and skills in students through strong positive relationships.

In *Poor Students, Rich Teaching,* Eric Jensen describes the belief of teachers in their own ability to bring about powerful change in the classroom and overcome the impact of poverty on students as the "Relational Mindset." He cites that relationships, in particular for students from unstable homes, influence classroom engagement, allow low-income students to perform equal to higher-income peers, and can help build resilience to protect students from the effects of early-life trauma.

A Relational Mindset requires teachers to adopt a more psychological perspective on student behavior, says Jensen, but that mindset shift can start with changing our words and beliefs, according to the Continua Group. Our personal beliefs and values inform our thoughts, words, and actions. So to adopt a belief that behavior skills (including social-emotional ones) are as important to academic success as reading and math, we should adjust our language around student behavior from an "I can't believe the student did this!" view to "why did the student do this?"

This will lead us to build relationships, maintain them, and work to repair them when connections are disrupted, eventually a relational mindset will help students develop relational literacy themselves. And this would have an impact on how we build our Multi-Tiered Systems of Support (MTSS) and Response to Intervention (RTI) systems to not only help some students, but to support all students. To make sure every kid succeeds, RTI expert Mike Mattos says we must treat behavior like we do reading and math. Just as we don't punish kids for struggling to read—and instead give them the targeted reading support they deserve—we should not just punish students for struggling with social, emotional, or behavioral skills. From a trauma-informed perspective, we should realize kids need interventions, coaching, and support to develop social-emotional skills, not punitive measures.

Because teachers play an important role in students' social-emotional skill development through relationships, one way they can work to enhance those connections in the classroom is by building on the ways children learn from each other in a social context. Teachers can make sure there are ample opportunities for student-to-student discussion, collaboration, and feedback in the learning environment within students zones of proximal development. Better communication will yield stronger relationships and better connections, working to undo the harmful effects of trauma.

Restorative Practices

Restorative Practices are flexible and responsive approaches to establishing, developing, and restoring relationships that enable people to develop a shared sense of community in an increasingly disconnected world. Restorative Practices empower students to resolve conflicts on their own and in small groups, and it's a growing approach around the country to building community and addressing student behavior issues in schools.

One way to better test scores and less discipline problems in schools is to adopt restorative practices. And what educators wouldn't want that, especially when approximately 5% of students represent 50% of all disruptive behaviors in schools? In classrooms or schools, the intent is to first make relationships with students, then maintain them, and (when things go wrong) repair the harm to those relationships. This happens through one-on-one, small, and large group interactions, bringing students together with adults to dialogue and discuss issues or questions with one another.

Restorative Practices have three main goals:

1. Developing competency to increase the pro-social skills of students, help them realize when they have harmed others, and address underlying factors that lead youth to engage in maladaptive behaviors.

2. Ensuring safety by directing students to recognize the need to keep the school community safe through strategies that build relationships and empower them to take responsibility for the well-being of one another.

3. Sharing accountability through providing opportunities for wrongdoers to be accountable to those they have harmed, and enabling them to repair the harm they caused to the extent possible, not just serving a punishment for the offense, which often leaves the victim out of it.

According to the International Institute for Restorative Practices (IIRP), a fundamental tenet of the Restorative Practices philosophy for schools is that students are happier, more cooperative, and more successful when educators do things with them, rather than to them or for them. Restorative Practices revolves around safety of all, meeting the needs of each individual, and focusing on the harm done to others through words and actions.

Brain research on stress, motivation, learning, and memory supports the use of restorative practices in schools. These practices have the aim of fostering strong connections between students and others in schools, and then using that as the basis for addressing issues that come up in the school setting. It is not a single strategy, set of talk moves, or group of activities; it is a philosophy of interpersonal connection between students and adults in schools that can support social-emotional development in students and learning in schools.

Implementing Restorative Practices at your school requires training and coaching of staff and students, progress monitoring of the practices themselves and student interactions, and debriefing about the implementation process along

the way. But because Restorative Practices emphasize the values of empathy, respect, honesty, acceptance, responsibility, and accountability, it is especially promising as a schoolwide means of supporting students social-emotional learning in a trauma-informed way.

It provides ways to effectively address behavior and other school issues, offers a supportive environment that can improve learning, and ensures student wellbeing by allowing for the reparation of harm. Restorative Practices are not about enforcing rules; the focus is on repairing harm done to others, fulfilling a need not met, and ensuring the safety of all. They can be incorporated into MTSS or a Positive Behavior Intervention and Supports (PBIS) system.

At their core, Restorative Practices require the formation of strong connections and the building of relationships. From there, harm to relationships can be repaired and connection can be restored. Because of our strong desire to connect with others, as people we do not typically want to harm those with whom we have a relationship.

Changes of behavior do not come from a punishment anyway, they come from a change of heart. That happens when three factors are present in addressing behavior: the impact of one's actions on others are made known, the possibilities of alternate actions are shown, and the opportunity to repair the harm done is given. After all, you cannot restore a relationship with, or repair harm to, someone with whom you have no relationship in the first place.

And in a school, with kids and adults who are longing to connect with others against a backdrop of trauma, our hearts' desire should not be for punishment, it should be for for the connective power of empathy, teaching, and forgiveness. Forgiveness doesn't excuse behavior; forgiveness prevents behavior from stepping on your heart.

Through the healing power of connection, and by installing restorative practices at a school or in a classroom, educators have the potential to positively influence school climate and strengthen social connections between students and staff. Restorative Practices can enhance the climate of a classroom and school much better than extrinsic rewards or threats of punishment ever could, because they empower students.

This philosophy and pedagogy meets the vital need to help students develop social-emotional skills, support interpersonal relationships, and be non-confrontational with even the most challenging students. In the end, Restorative Practices prioritize relationship building and mutual understanding over finger-pointing and retribution. With the primary 'rule' being "do no harm," Restorative Practices becomes a tool to fight against the negative impact of poverty and the harmful effects of trauma. Through the power of connection, it teaches students how to become the people we want them to be, and does not just expect them to do so on their own.

Seven Ways to Make & Maintain Connections

For any educator to connect with their students is a given, but it isn't always easy to do, especially once the school year gets busy. But because it is so crucially important to build connections with kids, even those not in your classroom, the work must be made a priority.

Here are seven activities that can be used with students or adults in the classroom or school setting. These can help to make connections, but also maintain them as well. This is especially important for the use of Restorative Practices later on to repair relationships. But it should not just be about the connections with kids. Remember that building connection and community with the adults in the building is key too, as it will set the tone for doing the same with students. Many of these activities are great ways to get the school year started, too:

- **Daily Check-Ins & Check-Outs—** each staff member drafts a set of students with whom they make sure to briefly check in and out each day
- **Community Building Circles —** using Restorative Practices circle format to get to know one another in the classroom, discuss topics, and have shared experiences
- **Team Building Activities—** Teampedia has a variety of easy and quick team-building activities for both small and large groups
- **One and Done**—in the first 30 days of the school year, demonstrate a single act of empathy (e.g., doing a favor) for a different student each day
- **Two by Ten—**Identify one or two students who need a connection early on in the year. For 10 consecutive days, invest two minutes each day with them to talk about anything but school
- **Three in Thirty—**Ask enough questions to discover three things about every student in the first 30 days of the year
- **Me Bag—**Have each student, and teacher, fill a bag with two to three items that represent who you are, and then provide an opportunity to share what everyone packed in their bag with each other

A Personal Connection

My favorite class in high school, also taught by my favorite teacher, was AP English. Despite struggling as a reader throughout school, due to a visual impairment, I loved literature. For me, reading was a private means to a very public end. I looked forward to what came as a result of reading: the opportunity to dialogue about a text with others in class. Even when I found reading to be tiresome or difficult, I persisted, because I loved discussing literature, especially poetry.

Nearly 400 years ago, English poet John Donne famously declared, "no man is an island." Like Cloud referred to cell phones, Donne was speaking of connection in the island metaphor. To this day, I can vividly recall discussing Donne's poem in 11th grade. Because of the social context of the class, AP English developed in me a sense of belonging, a growth mindset, and the grit necessary to succeed against the setback of having a degenerative eye disease.

Now, I realize that my affinity toward English class likely had less to do with the literary content and more to do with the personal connection I felt in the classroom. ■

Gary G. Abud, Jr. is an educational consultant, speaker, and writer. Previously, he served as an elementary school principal, taught high school science and technology, and worked as an instructional coach for PreK-12 schools. In 2014, he was selected as the Michigan Teacher of the Year and consults with educators, schools, and organizations on topics of curriculum, instruction, assessment, and technology. He resides near Detroit, Mich. with his wife and fellow educator Janice, and their preschool daughter Laina. Connect with Gary on Twitter @mr_abud.

COMMENTARY

Published March 17, 2016, in Education Week's Finding Common Ground Blog

Do Teachers Need Response to Intervention?

By Daisy Dyer Duerr

Response to Intervention (RTI) is something we talk about quite a bit in education. In fact, there are few successful schools you can enter today that don't have far-reaching RTI systems of support for their students. When students struggle, they may need something extra to help them along, and other students need an intervention that may be a little more in depth.

As a former school principal, I understand the benefits of RTI. Having been the Principal of a failing school where successful RTI implementation was instrumental in changing school culture and improving student learning outcomes, I can speak firsthand to the powerful impact of RTI practices.

But first...the basics.

Chris Weber and Tom Hierck, authors of "The RTI Roadmap for School Leaders" & "RTI is a Verb" say the following about RTI: Tier 1 is Differentiated, Tier 2 is Individualized, and Tier 3 is Personalized.

- Some students will require differentiation and scaffolds to optimally succeed and grow in Tier 1.
- Some students will need more time and alternative supports at the completion of units of instruction, as revealed by evidence, to master core priorities AND others will be ready for greater levels of complexity and will greatly benefit from opportunities to delve into priorities at greater levels of depth - Tier 2.
- Some students will be in desperate need of immediate, intensive, and targeted supports to ameliorate significant deficits in foundational skills AND other students will benefit from opportunities for students to dive deep into a passion - highly specialized supports to meet students' at, and nudge them from, their zones of proximal development - Tier 3.

What About RTI for Teachers?

Keeping those general principles in place as defined by Weber & Heirck let's think about how to create a Pyramid of Interventions for Response to Intervention for Educators. What might a non-evaluative systematic process of supports for educators accomplish. We already have models to follow; highly developed systems working for our students in our most successful schools; why wouldn't we use these same, proven principles and constructs for our educators?

RTI for students can be beneficial, in fact, I'd contend it's transformational when done properly at all levels; this I know from my experience as a Principal. As I work as a consultant I apply this experience...only I'm working with teachers instead of their students.

For example, this January I began working with a large district's secondary principals and assistant principals. My job has been coaching them on how to use the International Center for Leadership in Education's (ICLE) Collaborative Instructional Review.

ICLE's Collaborative Instructional Review is a process that involves the administrator collaborating with the teacher on lesson plans; following rubrics established for:

1) Rigor: This Rubric supports educators in building effective instruction based on indicators of rigorous instruction from three areas: thoughtful work, high-level questioning, and academic discussion.

2) Relevance: This Rubric supports educators in building effective instruction based on indicators of relevant instruction from three areas: meaningful work, authentic resources, and learning connections.

3) Learner Engagement: This Rubric supports educators in creating & implementing an effective learner environment that is engaging & aligned to learner needs based on these three indicators: active participation, learning environment, and formative processes and tools.

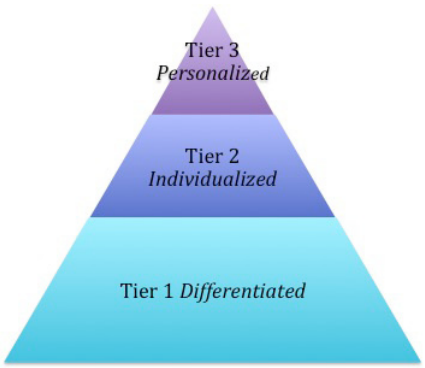
The administrator observes the lesson the two co-constructed together, takes copious notes while observing, then after some time to calibrate, they debrief together. Besides the co-construction of the lesson the other integral part is that the leader is observing student learning more than they are observing the teacher teaching.

After all, if the students don't understand the lesson, why teach it in the first place?

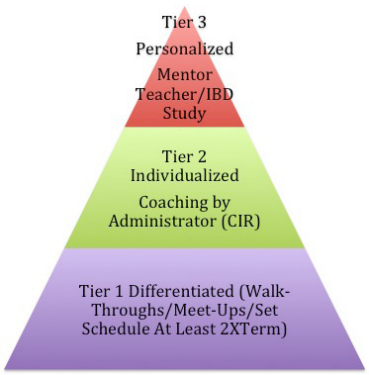
During the debriefing there is discussion of what went well, what didn't go well and why? They also discuss how the lesson could be improved in the future (if it could be) and what the teacher will do moving forward.

The outcome is *NOT* an evaluation, nor a "one and done" interaction, but the beginning of an ongoing series of collaborations and open dialogue between the administrator and the teacher to improve instructional outcomes. This clearly takes a great deal of relational trust.

While involved in this practice both the administrator and the teacher are



Student RTI



Teacher RTI

engaged in best practices for student learning and have a vested interest in successful outcomes.

It's my assertion: Highly Developed RTI Systems for Educators will result in higher quality Tier 1 Interventions; causing the need for Tier 2 & Tier 3 interventions for students to decrease.

How Do Leaders Provide RTI for Teachers?

Today's teacher/educator evaluation systems don't provide for improvement/instructional help for educators...in fact many are still reliant on a "check the box system." In the check the box system, feedback is rarely provided to teachers, so the evaluation becomes a waste of time (for more on that read Peter's blog about observations).

Observations should be based on cycles that include deeper conversations, and trusting relationships built between educators that result in improvement in instruction and student learning outcomes. It should not be a piece of paper or something you get on your inbox describing your lesson in "check box" terms.

One of the ways to have observations with more impact is for administrators to take on the instructional coaching philosophy in their school. In order for school leaders to provide RTI to their teachers, they need to work in partnership (Knight) with their teachers on a co-constructed goal.

One of the suggestions from a colleague on Voxer was that leaders intentionally schedule their week so they had a full day a week of instructional coaching. Leaders can observe and have partnership conversations with their teachers. However, as enthusiastic as the tone of the conversation began, the ever daunting task is how to approach coaching as a school building leader. The job of being a leader can definitely prevent leaders from taking on their version of an instructional coaching role...and that's where we go back to lackluster evaluation processes.

I do believe there is a happy medium. I have never worked in a district where my duties as Principal would have allowed for me to spend an entire day doing instructional coaching during the week, but I have done ½ days of instructional coaching often. I believe it's a matter of being intentional with our time as Principals. There was a consensus in the Vox that principals must be instructional leaders.

I don't believe this is possible if you don't model and "do the work" in the classrooms with your teachers. We must find "our way" of making this happen.

Proficiency and Beyond!

We ask for proficiency and beyond from our students; yet we provide their instructors with little to no supports to get them there. Educators need a culture where RTI/Coaching/Interventions is the norm for them; just like our students. Professional development at the beginning of the year is not enough. We need timely, systematic, supports available on a continuum. This is how we will meet the needs of more students at Tier 1. It's time...we make time. ■

Today's guest blog is written by Daisy Dyer Duerr, a former school principal who is now a national speaker and consultant.

COMMENTARY

Published January 5, 2016, in Education Week Commentary

Four Steps to Implement RTI Correctly

By Amanda VanDerHeyden, Matthew Burns, Rachel Brown, Mark R. Shinn, Stevan Kukic, Kim Gibbons, George Batsche, & W. David Tilly

With the 2001 passage of the No Child Left Behind Act, the national education agenda shifted from a focus on process and access to a focus on results. In this new education climate, Response to Intervention, or RTI, spread like the latest diet fad because it offered schools a way to get better results for students.

RTI refers to a collection of practices that involve identifying academic risk, intervening prior to full-blown academic failure with increasingly intensive interventions, and monitoring student growth. RTI is designed to remove the oh-so-human temptation to speculate and slowly mull over learning problems, and instead spur teachers into action to improve learning, see if the actions worked, and make adjustments in a continuous loop.

Guided by assessment data, children progress through a series of instructional tiers experiencing increasingly intensive instruction as needed. We—a group of education leaders and researchers—have heard it said, "Being against RTI is like being against motherhood." After all, who does not want children to grow?

However, knowing what works and doing what works are two different endeavors. It is difficult for people to successfully follow diets, stick to budgets, and, yes, to implement RTI. The key challenge, we believe, is getting the already-busy people in schools to implement RTI like an effective weight-loss plan, with a commitment to attaining long-term improvements for all students.

What are the actions that count in RTI? Here are four common implementation pearls for schools that want to attain better results with RTI:

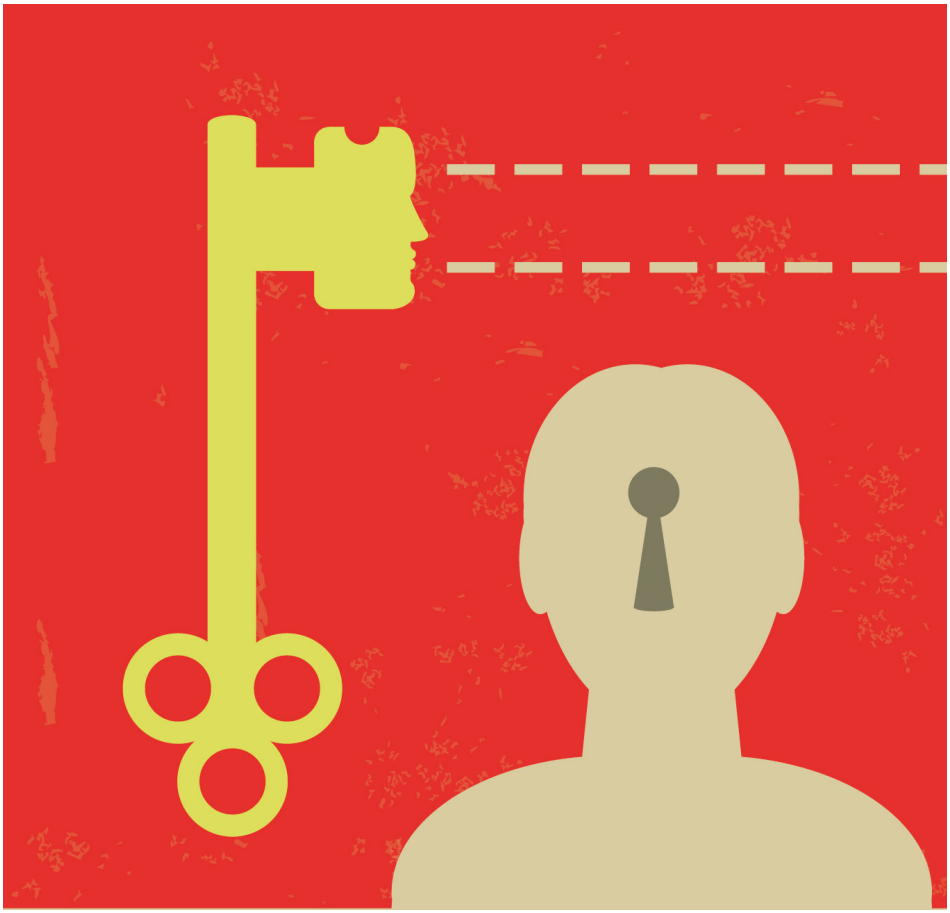
First, it is time for smarter screening. Schools are in an overtesting reality. Time spent on assessments is costly both in resources and lost instructional time. We routinely work with school systems that allocate 25 percent or more of their time to assessment. Because most schools are not clear about how they will use the assessment information—or what their actual decisionmaking needs are, for that matter—schools often hedge their bets and opt to collect more data. Most administrators have heard how powerful assessment can be, so they feel confident that more assessment is not harmful, even if it does not seem incredibly helpful. This type of

blind screening does more harm than good.

Year-end test scores can be used to indicate program health, and one or two single universal screenings can be used to reflect midstream performance. Use of planned instructional trials between assessment occasions, or "gated screening," improves the accuracy and efficiency of screening decisions to pinpoint the small group of students who really need stepped-up interventions—Tier 2 or Tier 3, in RTI parlance—when core instruction is working well.

In jargon-free terms, schools should administer only one low-cost screening tool to rule out or address a systemic, core-instruction problem first. They should conduct a series of brief follow-up assessments, with only the small group of students who appear to be at risk on either the first screening or the year-end test from the preceding year. Schools can minimize screening costs by selecting efficient measures and administering them well.

These assessments, however, cannot be allowed to interfere with teaching. Assessments are powerful, but there is a point of diminishing returns. We believe that most schools are in this zone of diminished returns because they are not assessing strategically.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Second, the focus of effective RTI implementation must be core instruction. Core instruction is where the teacher, student, and content meet every day for roughly 32 weeks. Every teacher should be supported to know exactly what students are expected to learn within their grade level, to map a calendar of instruction onto that timeline using resources beyond the textbook, and to assess student mastery of skills.

When core instruction is strong, a majority of students perform in the "not-at-risk" range on screening. When there is a systemwide problem, it is foolish to try to provide interventions to all of those children as a first step in RTI. When many children score in the "risk" range on a screening, it is not possible to figure out who truly needs help. As a result, a teacher will likely end up providing intervention to the wrong students, if he or she works only with a select group.

The process of trying to provide intervention to more than 20 percent of students rapidly overwhelms the system's resources. When large numbers of children are at risk, the first step should be core-instruction improvements and effectively delivered classwide intervention.

Classwide intervention is a high-yield and easy-to-deploy intervention tactic that, while not new, is not as widely used as it could be. One experimental study found that for every seven children who received classwide mathematics intervention, one child was prevented from failing the year-end state test in mathematics. Improvements to core instruction require serious teamwork, trust, and a paradigm shift in schools in which teachers may be accustomed to working in isolation. These teachers may even fear a loss of autonomy or vulnerability in doing the work required to upgrade their core-instructional program.

Third, schools need effective intervention systems that match student need. Many schools struggle to implement effective supplemental interventions. At the surface level, targeting reading fluency, comprehension, vocabulary, phonics, and phonemic awareness for the weakest students sounds great. But intervening without consideration for what a student specifically needs is like choosing an antibiotic without identifying the bacteria causing an infection.

For some children, the intervention will appear to work because they would have done fine without intervention. For some children, the intervention will work because it happened by chance to be a good match. And for others, the intervention just won't work.

In most schools, Tier 2 or 3 intervention is a prescription that lasts about 20 weeks, in which all students get the same thing, whether they need it or not. It is time to align Tier 2 and Tier 3 practices with student learning needs and require adults to be more responsive to whether these tactics actually improve learning.

Fourth, intervention intensity is not the same as "longer and louder." The ways in which RTI has tried to operationalize intervention intensity are out of sync with the best available evidence on what makes for more intensive instruction. Schools can improve implementation by considering research evidence to select instructional actions that produce strong returns on student learning. Such tools include aligning intervention

strategy with student proficiency, increasing the number of learning trials within an intervention session, providing more frequent and precise feedback to students, and adjusting intervention tactics between sessions based on student growth (or lack thereof).

Research has shown that RTI practices can work to improve student outcomes. Yet, the most pernicious threat to RTI—and the Achilles' heel of all promising practices in education—is poor implementation. Implementers can work smarter by investing in core-instructional support with renewed vigor, implementing classwide intervention supplements, paring down screening while using the data more effectively, and changing the way they operationalize intensity.

If the number of students attaining proficiency does not grow across screenings and years, then RTI is not working for your school and should be adjusted. Knowing how to adjust is pretty clear, but getting people to do the work with you is the hard part. ■

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