

Five Action Steps for School and District Leaders Implementing the Science of Reading

by Dena Mortensen

“So, how do we teach reading?” I asked this loaded question as a new teacher 22 years ago. As it turns out, the answer is complex—in fact, it is “rocket science” (Moats, 2020). Many teachers graduate unprepared to teach reading since only 53% of teacher prep programs cover phonemic awareness, phonics, fluency, vocabulary, and comprehension, which are all key components of reading instruction (National Council on Teacher Quality, 2020).

It is up to school and district leaders to construct effective and ongoing professional development for educators, equip them with evidence-aligned curriculum and resources, and create schedules that allocate sufficient time for reading instruction. Leaders' actions can increase student achievement (Grissom et al., 2021), but they must first understand and become willing to advocate for the science of reading. The science of reading refers to the body of research accumulated over the past several decades that helps explain how children learn to read. EdWeek Research Center (2020) reported that district or school leaders select 92% of the reading programs used in classrooms; however, the most popular programs selected are unsupported by the science of reading research.

Waterbury Public Schools is a high-needs, urban district with over 400 elementary teachers in kindergarten through fifth grade who instruct nearly 9000 students. As the supervisor of elementary reading and language arts, I began implementing findings from the science of reading with support from the district across all elementary classrooms in September 2013. District leaders were eager to improve student reading achievement. Upon hire, I was immediately asked to redesign our district's elementary reading program. In my previous role as the elementary vice-principal in Waterbury, we implemented evidence-based systems, materials, and professional development which led to significant gains in reading achievement. Drawing from that work, I proposed a plan with

a relentless focus on teacher development and student achievement grounded in the science of reading. I was granted full approval and support. Credibility, trust, and passion helped pave the way to change.

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Prior to the start of the pandemic, our students were making statistically significant progress yielding unprecedented levels of proficiency on our state's reading assessment. How did we do it? This article boils down what we had done to facilitate this progress into five action steps that school and district leaders can take today to begin implementing the science of reading tomorrow:

- school yourself
- analyze and adjust assessments
- analyze curriculum and secure resources
- redesign schedules
- provide ongoing professional learning

1. School Yourself

I started this journey by learning all I could about the science of reading, and I am still learning today. I needed some guidance, so I reached out to colleagues at Literacy How for support. Literacy How helps educators understand and translate reading research into practice through workshops and mentoring. I attended Literacy How's series on Structured Literacy, a comprehensive, evidence-aligned approach for teaching early reading skills, to understand reading development in children. I was amazed at how much I had to unlearn in order to move my thinking forward. The Structured Literacy workshops built my understanding and taught me to question everything. I began to follow reading researchers and organizations on Twitter. I joined professional organizations and subscribed to academic journals. I attended conferences near and far. I read the studies conducted in the field and stored them on Google Drive. The research and reading continues today.

To make any changes, I needed to build my understanding of the research. Relying on my past experiences or intuition could prove detrimental for students. Overseeing reading curriculum and instruction for children is a big responsibility and requires an informed consumer. A misinformed application could cost a child the opportunity to learn how to read.

To get started, find a mentor for guidance. This step is essential! Join The Reading League. Engage in all types of professional learning. Check out Amplify's Science of Reading Handbook (Amplify, 2022) and the Science of Reading: Defining Guide (The Reading League [TRL], 2022) for a collection of easy-to-follow resources about the science of reading. Attend webinars or classes like those offered by The Reading League's Online Academy. Follow researchers and organizations on Twitter such as @reading_league, @DyslexiaIDA, and @ReadingRockets. Subscribe online to the list-serv SPELLTalk (Learning by Design, n.d.). Log onto Google Scholar and read the studies firsthand. Store your articles; you will continue to draw from them over and over again. Learning is an ongoing process and never actually ends. **WARNING:** You may need to check your opinion at the door. Learning about what works may conflict with what you believe and what you were taught. Trust the evidence.

2. Analyze and Adjust Assessments

As I began building my knowledge, I started to question the assessments teachers administered. Our literacy facilitators, or coaches, helped

analyze the assessments and determine the value of administering each one. Through this process, we discovered more time was spent on assessment than instruction. Yikes! Further, we lacked an appropriate universal screening measure to identify students at risk of reading failure. Our state department of education provided guidance on curriculum-based measures (CBMs) for universal screening and progress monitoring. A CBM is a type of assessment that is generally timed (completed in one to three minutes) and provides data on student progress in relation to the curriculum. We selected Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to help us identify students at risk of reading failure. This assessment became our sole universal screener for all students in kindergarten through fifth grade.

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Intervening early is critical, but to do so you must administer a universal screener that helps to identify students at risk. Including a CBM universal screener helped us to prevent children from falling through the cracks by swiftly identifying those in need of support. Lyon (2003) notes we could drop the percent of fourth-grade students who struggle to read to six percent if we identify needs early and intervene with research-based practices.

To get started, create an inventory of your assessments. What do your assessments measure? How much time do teachers spend administering them? Do you administer a universal screener to help identify students at risk? Do you administer a CBM to monitor progress? Add or drop assessments as needed. **WARNING:** What a district requires is just one piece of the assessment plan. Teachers should use diagnostic assessments as appropriate to dig deeper and plan lessons focused on students' needs.

3. Analyze Curriculum and Secure Resources

While analyzing our assessments, we also began auditing our curriculum and materials. We noticed our curriculum lacked explicit, systematic, and cumulative phonemic awareness and phonics instruction. Further, our schools

housed thousands of leveled texts, but had few decodable books. We ultimately invested in a foundational skills program for kindergarten through third grade that supported our Tier 1 curriculum and provided our teachers with explicit lessons and interactive materials, such as whiteboards and magnetic letters for building words. We also added a core reading program from kindergarten through fifth grade to equip our teachers with rich text sets, opportunities to build language, vocabulary instruction, decodable books, fluency instruction, close reading activities, and writing instruction.

We also hired more literacy facilitators so each elementary school had its own facilitator who supported all instructional staff via ongoing consulting and coaching. We understand that solid, evidence-based Tier 1 programming is central to all instruction, but building our program took several years. In the meantime, our universal screening data was alarming. We had many children who required immediate support. These children were set to move through the grades in advance of the upcoming changes to Tier 1. To support our struggling students, we simultaneously redesigned our framework for Multi-Tiered Systems of Support (MTSS) while rebuilding our Tier 1 program. Since our classroom teachers provided Tier 2 instruction, we began with Tier 3 by investing in human resources. While each school employed at least one reading teacher, we required more interventionists to support our struggling students, so we hired reading tutors. Securing both materials and people is essential.

WARNING: People get very comfortable with the materials they use. Be prepared to share the evidence when asking educators to change what they have been doing.

Since we were focused on building a research-based program, teachers needed research-based materials and ongoing support to implement it. It is important for leaders to support the alignment between what they ask teachers to do and what they provide teachers in the form of resources to actually do it. Equip teachers for success. We used our new knowledge to set criteria and make informed decisions about supporting materials and human resources.

To get started, review your curriculum. Is it aligned to the science of reading? Do your teachers have research-based materials? If you are unsure, check out the *Instructional Materials Evaluation Tool for Grades K-2* by Achieve the Core, or go to *EdReports* to compare the effectiveness of popular foundational skills programs. Are you employing an MTSS framework? Do you have staff to teach your core curriculum and staff to address the needs of anyone falling behind? Review your staffing model and hire support as appropriate. **WARNING:** People get very comfortable with the materials they use. Be prepared to share the evidence when asking educators to change what they have been doing. Change is not easy. Providing an evidence-based rationale helps people understand why change is necessary and how it will support student growth.

4. Redesign Schedules

Once we knew how to identify students at risk by using DIBELS, we set up schedules devoting up to three and a half hours for core instruction and intervention. Specifically, every school allocated 90-120 minutes for whole group and small group Tier 1 reading and language arts instruction; an additional 30-45 minutes for foundational skills instruction in phonemic awareness, phonics, spelling, and handwriting or cursive (grades K-3); and another 45 minutes for intervention or enrichment. This last block was staggered throughout the day affording our expert reading teachers and tutors the opportunity to deliver Tier 3 intervention lessons across every grade level without scheduling conflicts. When available, our reading teachers also provided additional Tier 1 small group prevention lessons, particularly at the beginning of the year in kindergarten. Classroom teachers delivered all Tier 2 intervention, and special education teachers serviced students with IEPs who received pull-out instruction during this time. Students not receiving additional support often received enrichment from the specialists. Groups were flexible and changed based on the data.

To help ensure fidelity of implementation, we secured additional time to teach reading and language arts. In fact, we nearly doubled the time we had in the schedule. Every principal redesigned the day to include the time necessary for reading and language arts instruction. A set schedule enabled literacy facilitators to plan coaching cycles across grade levels and allowed reading teachers to service each grade daily. Further, consistent schedules supported the principal's ability to monitor instruction

and regularly provide supportive feedback to teachers.

WARNING: Some might argue that too many minutes are allocated for reading and language arts.

To get started, compare the instructional minutes available during the school day and the instructional minutes needed for reading and language arts. Map out the intervention block first, staggering it throughout the day so it does not overlap across grade levels. Then schedule each subject accordingly. **WARNING:** Some might argue that too many minutes are allocated for reading and language arts. However, reading and language arts include multiple components, such as phonemic awareness, phonics, vocabulary, comprehension, oral reading fluency, spelling, grammar/language, writing, and handwriting—many of which are not explicitly taught in the content areas and therefore, warrant a bigger piece of the instructional pie.

5. Provide Ongoing Professional Learning

Every single change we made began with professional development. Some of the changes

we made required specific training from the publisher. Since we have over 400 elementary classroom teachers, it was not possible to get everyone trained in-person by the publisher. Instead, we built a system to bring training to scale where our 20 literacy facilitators received the training firsthand using a Training of Trainers (ToT) model. For example, when learning how to assess using DIBELS, we brought in a consultant from the publisher who trained the literacy facilitators. The literacy facilitators then went back and trained the teachers. Teachers received follow-up support during bi-weekly Instructional Data Team (IDT) meetings and through coaching cycles. Outside of providing training to teachers, literacy facilitators also receive professional development pertaining solely to them with the goal of building both their content knowledge and coaching skills. Staying current is essential. The literacy facilitators and I meet weekly to share new information and clarify understanding as appropriate. Literacy facilitators also meet weekly with their principals and vice-principals for Instructional Leadership Team (ILT) meetings to discuss all things literacy. Ongoing, embedded training and communication are fundamental to success.

We provided workshops and ongoing consulting and coaching to help teachers implement the new curriculum, assessments, and materials aligned to the science of reading. If you ask teachers to do something, you must

Table 1

Five Action Steps for Leaders
1. School Yourself <ul style="list-style-type: none">• Find a mentor• Join science of reading organizations
2. Analyze and Adjust Assessment <ul style="list-style-type: none">• Administer a CBM universal screener to all students• Identify needs and intervene early
3. Analyze Curriculum and Secure Resources <ul style="list-style-type: none">• Secure materials aligned to the science of reading• Hire literacy coaches and reading teachers for support
4. Redesign Schedules <ul style="list-style-type: none">• Allocate ample time for reading and language arts in the daily schedule• Include a staggered intervention block across grade levels to provide tiered support
5. Provide Ongoing Professional Learning <ul style="list-style-type: none">• Provide training, including coaching, on all new initiatives• Stay current and have a plan for sharing new knowledge

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define it and provide the necessary training and support.

To get started, build your team to extend your reach. Your team could include anyone with reading expertise, particularly literacy facilitators, who could support ongoing and embedded professional development for your teachers. Map out a professional development plan that addresses any new assessments, strategies, or programs implemented. Always provide training on content and instructional practices grounded in the research. **WARNING: The training is never complete. The research is constantly evolving. Stay current and have a plan in place to share all new knowledge with staff.**

Children everywhere depend on leaders to build systems that support reading development. Students need us to provide them with teachers who can deliver expert reading

instruction. Teachers need us to equip them with time, tools, and training aligned to the research. Listen up, leaders! Our students need us. Our teachers need us. What will YOU do today? Table 1 can help you get started! ■

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Readers, please enjoy the special section interviews on the next pages to learn how award-winning leaders have implemented the science of reading.