Introduction

My name is Stefanie Waite and I'm the director of professional learning at the Stern Center for Language and Learning, where I previously served as a teacher and an evaluator for 21 years.

Reading Achievement & Education Spending

As you know, only 39% of Vermont's fourth graders performed at or above "proficient" levels on the National Assessment of Educational Progress (2019; Appendix A). Despite consistently spending more per general education student than most states, the percentage of proficient readers in Vermont has declined steadily for the past 20 years (NAEP, 2019). In addition, Special Education spending has increased steadily. Between FY14-FY16, Special Education Spending increased 11% or \$300 per student, and we now spend more than \$288 million per year on Special Education (Kolbe & Killeen, nd).

Ninety-five percent of children can be taught to read (EAB, 2019; Appendix B). An enormous and still-growing body of research stresses that early, explicit, and systematic instruction in phonics, along with direct instruction in phonological awareness, can prevent reading difficulties and can also remediate reading difficulties (Kilpatrick, 2015). Structured literacy instruction works well for all learners because it connects what young children already know—speech—to what they still need to learn—print. This is key because learning to read is "a vastly different neurological process than learning to speak…surrounding children with written language and reading them engaging books is not enough for most students" (EAB, 2019; Appendix C).

Structured Literacy, Equity & Teacher Knowledge

There are many complex problems in education that we don't yet know how to solve. Teaching all children—not only those with dyslexia—how to read well by third grade is *not* among them.

Reading and effective ways to teach it have been studied more than almost any other cognitive process (Moats, 2015). Over the past four decades, research has provided increasingly compelling evidence that the most effective way to establish strong reading skills in the early grades is to use an explicit structured literacy approach that links speech to print (Yoncheva, Wise, & McCandliss, 2015; Seidenberg, 2017; Appendix D). The content and principles of structured literacy teaching have proven to be more effective than the practices that prevail in many classrooms today (Moats, 2017).

Teacher Impact

Teachers matter more to student success than any other aspect of schooling (Opper, nd). Teachers, not programs, teach students how to read. According the International Literacy Association (2020), the biggest barrier to equity in literacy education is the variability of teacher knowledge and teaching effectiveness. Teachers cannot teach what they do not know, and teacher preparation programs generally do *not* prepare teachers adequately in the area of reading. A study of more than 1,200 elementary teacher prep programs found only 26% provide adequate instruction in all 5 of the essential components of literacy instruction, which are: phonemic awareness, phonics, fluency, vocabulary, and comprehension (NCTQ, 2020). English is a rich, complex language, but only 4% of English words in print defy explanation and are truly irregular (See Appendix E). Providing educators with knowledge of what evidence-based structured literacy instruction entails and ensuring they have the support they need to incorporate structured literacy into their teaching practice will improve reading outcomes for *all* students, not just students with dyslexia.

Goal of Reading = Comprehension

Most educators agree that the goal of reading is *comprehension*. Likewise, all educators want to foster a love of reading in children. Reading underpins everything in education (Wheldall, Glenn, Arakelian, Madelaine, Reynolds, & Wheldall, 2016). Reading is the basis for the acquisition of knowledge, cultural engagement, democracy, and success in the workplace (Castles, Rastle, & Nation, 2019). Low literacy is associated with low self-esteem, socialemotional problems, low- or under-employment, and poor health. "Literacy permeates all areas of life, fundamentally shaping how we learn, work, and socialize. Literacy is essential to informed decision-making, personal empowerment, and community engagement" (Dwyer as cited in Gunn, 2018, para. 5). Since reading, unlike speech, is not a natural process, the brain must recruit areas of the brain designed for other kinds of information and rewire itself for print (Wolf, 2018).

Using a structured literacy approach in K-3 has proven to be the most effective and efficient method to teach children how to read well. Scientific advances in brain research related to reading in recent decades have given the research community a deep, robust understanding of reading development, but this knowledge has not yet reached those who need it most—teachers and students. While this issue impacts us all, children suffer most because children who aren't reading on grade level by third grade are four times less likely to graduate from high school (Wexler, 2019, p. 8).

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The proposed bill *alone* will not solve the problem of low reading achievement but could be a step in the right direction. Like most of us, educators dislike it when policymakers have a say in how we do our jobs.

However, if *collectively* we consider that our current approach is failing 61% of children, perhaps we can agree to align our teaching with the evidence showing that a structured literacy approach works for all children. W.E.B. DuBois said, "*Of all the civil rights for which the world has struggled and fought for 5000 years, the right to learn is undoubtedly the most*

fundamental. "As an educator, I believe we have an obligation to teach all children how to read using evidence-based methods proven to work for all children.

Closing Stories

I'd like to close with two stories. The first is about a boy named Carter who came to the

Stern Center two years ago in 2nd grade. His story is posted on the Stern Center's website, and

I'll read excerpts from it now.

Meet Carter: a confident, motivated, self-published author with plans for a 30-book series. Carter is nine years old, and his confidence is brand-new.

Carter has dyslexia. In preschool, Carter learned to write his name but had trouble remembering the alphabet and doing basic writing tasks. In kindergarten, while his classmates began learning how to read and write, Carter struggled.

In first grade, "Getting him to read at home was like pulling teeth," his mother said. When Carter's turn came to read a section of a story, his go-to reply was, "I can't read," or, "It's too hard for me." His parents bribed him to do homework. At school, Carter secretly counted the words on the page while pointing to them during silent reading time to hide the fact that he could not read. Teachers provided extra help several times per week, and his parents worked with him at home, but his skills in reading and writing fell further behind. He seemed unmotivated to learn and made little progress. When someone assured Carter's parents he would "catch on" eventually, they opted not to wait.

In second grade, Carter completed an evaluation at the Stern Center, which revealed dyslexia, a specific learning disability that impacts reading and spelling development. The evaluator explained that Carter was a bright boy with exceptional difficulty processing and remembering

sounds in words. This skill, otherwise known as "phonological awareness," forms the foundation of early reading. The evaluation showed that Carter's foundation for reading was weak. Carter could not connect the sounds in words to letters on the page, which explained why learning the alphabet was so hard for him and why he could not sound out words. "It's scary, of course, to have a diagnosis," said his mother, "but at least we knew what to do."

At school, Carter began working with teachers who showed him how speech maps to print. Equipped with the evaluation report that recommended direct, systematic, multisensory instruction, his school team supplemented the instruction he received with his classmates in a program called Fundations® with individual, more intensive support using the Orton-Gillingham approach. For the first time, Carter realized that he did not have to memorize all those words in books—he could read them!

By the end of second grade, reading started to click, and Carter asked his mom if they could publish a book based on an idea he had during writing time when he created short, simple stories about a boy and a bat. Carter wanted to inspire others who struggled with reading like he did, but he wanted his story to be exciting and fun to read. Over the next year, Carter and his mom traded ideas and began piecing together short sentences about a boy with dyslexia who had a great imagination but was afraid to read in front of his class. Progress was slow, but Carter persevered, and his mother patiently helped whenever a new idea struck. Many revisions and months later, the image for a cover design sprang to mind, setting in motion the final steps to publish The Boy and the Bat.

Though today he brims with confidence, reading and writing remain challenging. However, Carter is motivated to figure out words and to persist when challenged. He dreams about becoming a famous author.

Inspired by his idol, Dav Pilkey, author of Captain Underpants, who has dyslexia and ADHD, and powered by his earned confidence, Carter wants to help kids who struggle with dyslexia. Carter's current goal is to find a publisher and an illustrator for his sequel, The Boy and The Bat—Dino Death. Today, if you ask him to sign your copy of the book, expect to see his new go-to message: "You can do anything! Love Carter."

Matt's story

The second story is from Matt Zahn, a current PhD candidate in economics at Johns Hopkins University. Matt delivered the commencement address when he graduated with honors from George Washington University, where he earned a bachelor's degree in economics and political science and minored in statistics. At a Stern Center event in 2018, he shared his experience of being a nonreader in third grade to attending graduate school and his speech is posted on YouTube <u>https://www.youtube.com/watch?v=H1DpIMjiGwI&t=2s</u> I'll read excerpts from it now:

 In elementary school, I had been doing an artful dance of covering up the fact that I was unable to read. I memorized books that were read to me and simply repeated back what I had memorized.

- Naturally, it was not long before my teachers and parents realized I was incapable of reading and well behind my classmates.
- *I was referred to the Stern Center for a comprehensive evaluation.*
- Following the testing, my family was informed that I was dyslexic.
- *My mentor and teacher at the Stern Center, the late Neil Shapiro, defined my experience. He was cool, confident, and charismatic.*
- Basically, everything I was not as an 8 or 9 year old who couldn't even read.
- I left the Stern Center at the end of eighth grade. Neil had tutored me in reading, writing, and math. In a few years, I went from a student who could not read or write to one who was performing at a twelfth grade level.
- In conclusion, without the tutoring and guidance I received from the Stern Center and Neil, I would not be where I am today. The work that the Stern Center does is so important. It has had a profound impact on my life and has helped me become a successful and contributing member of society. Thank you.

Closing Statement

In closing, the work you are doing on this legislation is important for all educators and children

because we know we can teach all children to read by the end of third grade. We just need to

support teachers in doing this critical part of their work (See Appendix F).

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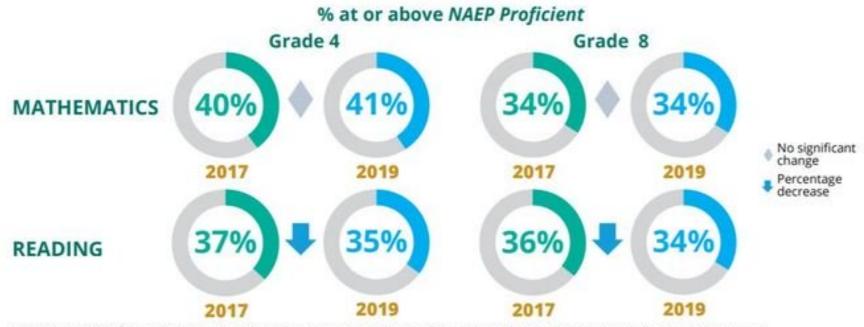
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Appendix A

'No Progress' Seen in Reading or Math on Nation's Report Card



Percentages of students at or above NAEP Proficient unchanged in mathematics and lower in reading since 2017



NOTE: The NAEP Proficient achievement level does not represent grade-level proficiency, but rather competency over challenging subject matter. NAEP achievement levels are to be used on a trial basis and should be interpreted and used with caution.



Of elementary students, regardless of background, are cognitively capable of learning to read when they receive sufficient direct instruction on the foundational skills of reading

SKILLED INSTRUCTION MATTERS, ESPECIALLY FOR CHILDREN AT-RISK FOR READING DIFFICULTIES!

Timeline of Spoken and Written Language in Relation to Human History

198,000 B.C.E.

Spoken Language

Modern humans first emerged in Africa around 200,000 years ago and communicated using spoken language

3,500 B.C.E.

Written Language

Cuneiform, the earliest written language, dates back to Mesopotamia around 5,500 years ago

1439

Books

2019

Johannes Gutenberg invented the printing press, which created the first mass-produced book, The Gutenberg Bible



Of human existence includes written language and reading. The human brain has not evolved to learn reading naturally.

Appendix C Learning to read "is a vastly different neurological process than learning to speak...surrounding children with written language and reading them engaging books is not enough for most students."

(EAB, 2019)

Human Brains are Not Naturally Wired to Read

Appendix D

Teachers can *accelerate* the process of learning to read with systematic instruction making explicit links between sounds and letters (Seidenberg, 2017, p. 121).



TWO THINGS ABOUT ABK SEIDENBERG 1 ARF READING T NGUAGE AT THE WI SPEED OF SIGHT HESE WORDS I YOU ARE AN E HOW WE READ. THE S SO MANY CAN'T.

"...backed by decades of research...the only responsible way to teach children to read well is to build up their abilities to connect reading with speech and then to amplify these connections through practice...with the neurological networks that undergird them."

Wall Street Journal; 2017

Appendix E

4% of English words in print defy explanation & are truly irregular.

50% can be spelled accurately by sound-symbol correspondence patterns alone.

36% can be spelled accurately except for 1 speech sound (usually a vowel).

been_{go} her Some into and about way where called than laugh number made make their had have orother

Appendix F

