Comment Report

SSB 3069
A bill for an act relating to reading instruction, including modifying provisions related to the language arts instruction provided to students enrolled in kindergarten through grade three and the preparation in reading theory provided by practitioner preparation programs, and including applicability provisions.(See SF 2195.)

Subcommittee Members: Rozenboom-CH, Donahue, Evans

Date: 01/23/2024
Time: 01:00 PM
Location: Room 315

Name: Sandy Wilson

Comment: Citizen Engagement declares IN FAVOR of SSB 3069. Please advance the bill.

Name: Dr. Lindsay Grow Harrison

Comment: As a teacher educator focused in literacy education, I support the changes in SSB 3069. Grand View University has established a Dyslexia Specialist Endorsement and also provides instruction for preservice teachers that reflects the practices included in the bill. As a state, we must get more clear about what teachers should be doing and provide as much guidance as possible. Educators have many demands on their time and the more we can direct them toward evidencebased practices and curriculums, the more we will see Iowa's literacy rates rise. Increasing specificity will focus educators and teacher educators toward instructional strategies that are making a difference in the lives of children. Please advance the bill

Name: Nicole Prati

Comment: Reading tutor in favor of Bill SB 3069. Its important that our professors and teachers learn AND learn to teach children the logic of the English code so that they can blend and segment words on a page. No more cueing, no more predicting, no more beanie animals who teach children ineffective methods to encode and decode words.

Name: Jamie Cornelius

Comment: Advance the bill

Name: Colleen Wieland

Comment: As a SpeechLanguage Pathologist & Mother of an 8 year old girl (3rd Grader) who was recently diagnosed with Dyslexia, I am in SUPPORT of this bill. We have watched our daughter struggle to learn how to read and the cueing and memorizing strategies failed her. (Please note this was not due to the teachers and I do not blame them. They were teaching with the tools they had). Our daughter was told to continue to work hard and that she would eventually catch up to he peers. Despite reading intervention since Kindergarten and summer intensive programs, she continued to regress and as a result, she began to demonstrate anxiety symptoms at school, which intensified as she aged. She underwent extensive medical and neurological testing which fortunately came back negative, however, identified there was anxiety and we needed to identify the cause. During this entire time, she continued with her reading programs at school, was told she was fine, that there was nothing wrong with her, and that she needed to continue to work hard and practice reading utilizing the strategies taught in school. We spent countless nights in tears and fights. I watched her struggle to sound out words. She didn't know HOW to sound out words. I watched her reach and grasp to make up words, in an effort to try

to get it right. I watched her lose her place; I watched her scan frantically through the pictures and words to see if she could make sense of it all without knowing the true answer; I watched her cry and say she was not like the other kids and that she was stupid and she just couldn't do it. We continued to speak with her teachers and implemented all the strategies suggested and continued like this through 3rd grade. While in 3rd grade, we sought out a private diagnostic evaluation and she was officially diagnosed with Dyslexia. We had lost our daughter's trust. All along she was trying to tell us there was something wrong, something hard, and we missed it. We kept telling her she could do it and she just needed to try harder but the truth was she couldn't. She needed an explicit and systematic approach to learn HOW TO READ. And that's exactly what we are doing now and she is starting to smile again and she is now learning HOW to read! She's in 3rd Grade. We have a lot of work to do but now we are on the right path and we are going to get her there. This bill is about more than reading. It's about supporting our teachers and listening to our kids and giving the them the support and tools they need to succeed. Learning to read needs explicit and systematic instruction and teaching. It is not just learned or absorbed. When our kids aren't able to read and they start to stand out amongst their peers and they start to show us signs of struggle and they are repeatedly told there is nothing wrong and that they just need to work harder they suffer. They suffer greatly. Dyslexia affects a child's reading but it also affects their life: sports, piano lessons, play dates, ordering from a menu, church participation. We MUST give our teachers the tools they need to SUPPORT and TEACH our kids HOW TO READ. We MUST support our teachers and empower them to identify the signs and symptoms of Dyslexia. We MUST teach our kids HOW TO READ by following what we now know about the science of reading and utilizing an explicit and systematic approach. This Bill will improve a child's reading and quality of life. Thank you for reading. Sincerely,Colleen Wieland,M.A. CCCSLP MotherAdvocateSpeechLanguage Pathologist

Name: Casey Condon-Yu

Comment: I am in favor of SSB 3069. As a parent of children that had challenges learning to read in school, and an educator that earned a degree in Elementary Education with a reading endorsement from the University of Iowa, I had to find the science of reading on my own, and pay for additional training out of pocket. Over the past ten years, I have seen firsthand how threecueing fails many students, and instruction based on the science of reading dramatically improves reading ability, test scores, and confidence.

Name: Theodore Wieland

Comment: As a parent of a child with dyslexia I support this bill.

Name: Shelley Skuster

Comment: I'm a reading tutor in favor of SSB 3069. It is imperative that we lay the groundwork to abandon harmful practices such as threecueing, predicting and guessing. Iowa kids deserve to have educators who understand and implement instruction that aligns with the Science of Reading.

Name: Courtney Collier

Comment: I support SSB 3069. Im a mom to 3 school age children. The k5 students of Iowa deserve to be taught how to read and understand the English language. Asking them to memorize sight words and guess a word based on cues is a disservice to our students and is setting them up for literacy failure. The reading proficiency outcomes have declined in recent years due to this. Lets get back to teaching reading with what we know works. Also, elementary schools should be required to use a reading curriculum.

Name: Megan Hunemuller

Comment: As a parent of a dyslexic child, I am in support of SSB 3069. My child was

struggling in 1st grade but "wasn't far enough behind" for help (she was in the bottom 5% of her class). In 2nd grade she received an IEP and was given more one on one help but balanced literacy was used. In 3rd grade we were able to use a Science of Reading approach, which was awesome but she was still receiving 3cueing in her gen ed class which caused confusion for her. By the time we were able to get the correct curriculum on board for her instruction (roughly 20min per day), it was too late. My daughter is now in 7th grade and is still struggling to learn the basics. She has been receiving a dyslexic based, one on one session daily (MF, 45min) for 5 years now and is only half way through it. It should only take 3ish years to complete but due to all the balanced literacy stuff she had to unlearn it is taking longer and to say she is frustrated is an understatement. Please consider passing this bill as direct, systematic and explicit instruction has been proven to help all students, not just dyslexics. Make language arts accessible for all kids! Thank you for reading and good luck in session.

Name: Gabby F

Comment: As a mother of a 1st grader and a school board member I can not stress the importance of teaching our children proper reading skills. Our school has implemented phonics for our K4 and I have seen great improvement in my daughters reading. Please vote yes on this bill.

Name: Tanya Bodenstedt

Comment: Mother of dyslexic child in favor of Bill SB 3069. It is so important for our future educators to learn how to teach ALL children. My son was diagnosed in 1st grade because he had a teacher who was selfeducated about dyslexia, how to recognize it and also intervention strategies to support those children. We should implement proper instruction and coursework while the future educators are still learning themselves.

Name: MICHELLE JOHANNSEN

Comment: Please pass SSB3069 as a mother of a child who is dyslexic. I have told the school since she was in pre school something is not right I think she is dyslexic. She is now in 5th grade. We took her to and privately paid for testing only to find out she IS dyslexic. Our school FAILED to help her because "they don't test" for dyslexia. She is catching on and will get better. This could not be more wrong! Teachers need to be taught better. Schools need to provide better for our children. This is not something that is going to go away. 1 in 5 kids have some level of dyslexia. It is time that the state of IA step up.

Name: Kelly Smith

Comment: I support SB 3069 and ask you to advance this bill.

Name: Kate Niedermann

Comment: As an educator and parent of a dyslexic child, this bill is VERY important. Please pass the bill SSB 3069 so that ALL students have access to the very best education and educators possible. They deserve it!

Name: Dana Howell

Comment: I support SB 3069 and ask you to advance this bill.

Name: Amy Tharp

Comment: As a special education teacher and parent, I support the changes in SSB 3069. I have had the unfortunate experience of watching children, especially those with reading difficulties such as dyslexia, fail year after year because they were never explicitly taught to read. I have watched parents cry out for help because they are tired of watching their children fail and our public schools do not have the information or resources to help them. Sadly, I was part of this problem because I never learned to

explicitly teach reading. I learned the Science of Reading on my own and have continued to pay outofpocket to learn about Structured Literacy and how to teach children, especially those with reading difficulties, to read. Research has shown that all but a very small percentage of children can learn to read, but this cannot happen without identification and systematic and explicit instruction. We have to stop setting our children up for failure because they deserve our BEST, and what we are doing is not our best. When we know better, we do better ... and it is time that we start doing better!

Name: Stephanie Edgren

Comment: Disclaimer: I am an education and outreach coordinator with the Iowa Reading Research Center. The opinions below are mine. I am not speaking as a representative of the Iowa Reading Research Center.First, I wholeheartedly support this bill! I support it as a parent, as a teacher, as a college instructor, and as an advocate for children.I have a bachelors degree in early childhood education, a masters in education, and both K12 reading specialist and K8 reading endorsements. NONE of these programs taught me HOW to teach reading or HOW to remediate struggling readers using evidencebased practices. I learned to teach reading using a whole language approach and the 3cueing system. I expertly utilized these approaches in teaching kids how to read. Unfortunately, I now know those approaches are ineffective. They do not lead to building the neural pathways in the brain that are necessary for reading. Those approaches train the wrong areas of the brain. While approximately 40% of students learn to read easily or relatively easily, the majority of children require explicit and systematic instruction in all areas of literacy and language to learn to read. This isnt being taught in many classrooms or teacher preparation programs. If you want to learn more about the implications of reading instruction and the brain, Id highly recommend the work of researchers and neuroscientists, including Stanislas Dehaene, Mark Seidenberg, Maryanne Wolf, Guinevere Eden, Bruce McCandliss, to name a few. I taught for 25 years in the K12 public education system in Massachusetts, Florida and Iowa. My experience spans the preschool, elementary, and middle school levels. I also served as an intervention coach and as an instructional coach. My last 3 years in the K12 system I taught 7th grade reading in the same district I had taught first grade. I worked with 7th graders who had been struggling and receiving intervention services for YEARS and they were still struggling readers. I worked with 7th graders who were reading at 1st and 2nd grade but know were struggling. I knew what was taught at the elementary school, the interventions that were in place and how hard the teachers worked to try to remediate reading difficulties so I couldnt understand what was the root of the problem. This set me on the path to figure out why so many students were struggling and what I could do about it. My journey into the science of reading began. Over the last several years I have learned a great deal about reading and the brain, that I wish I had learned in college and in professional development. I have also taught at the college level. During this time I taught literacy courses. I aligned the courses to the science of reading (the research on how children learn to read, why some kids struggle and how can we remediate). During my time at the collegiate level I learned university professors have autonomy in the selection of course topics, objectives, readings, assignments, and field experiences. Many professors do not have the knowledge of evidence based instructional practices and are teaching debunked methods that they used when they were teachers. In many cases, they are not to blame because they cant teach what they dont know, just as teachers cant teach what they dont know. What I do know is that there are professors who refuse and will refuse to update their courses to align with the scientific research if not required by law because they wholeheartedly believe in academic freedom. While academic freedom may be important to some, it should not supercede a childs opportunity to learn how to read. Over the last 2 years I have volunteered my time working with a group of higher education faculty across the US to strengthen reading coursework in teacher prep programs. We organize and host conferences and webinars for faculty with the purpose of supporting faculty to fully incorporate the SOR into their

programs. We provide opportunities to build knowledge on the SOR and resources to align coursework with the goal of strengthening how future educators are prepared. There are several different resources to help faculty of teacher preparation programs align their literacy coursework. This work must be done to better prepare preservice teachers to teach not only in Iowa but across the nation. Many states require teachers to pass an exam aligned with reading research to obtain a teaching license. If Iowa preservice teachers arent taught methods aligned with reading research we are setting them up for failure. The key point is that reading is a civil right! ALL students deserve to be taught by teachers who have the knowledge and skills to help them become proficient readers. Literacy = equity. Literacy gives a person a chance in life. Imagine not being able to read and understand your medical appointment summaries, prescriptions, job applications, etc. If Iowa children arent taught how to read we are setting them up for failure. Id like to clear up a few misconceptions Ive heard during the meeting today and previous conversations with other Iowans: SSB 3069 is focused on HOW to teach reading. The 3cueing system has been debunked by scientific research. The science of reading is not a program or curriculum. It is a large body of research, conducted over the last 45 decades, around the world, in multiple languages, and by a variety of disciplines, including neuroscience. There are not many ways to learn how to read. As neuroscientist Stanislas Dehaene in his book Reading in the Brain: The New Science of How We Read (2009)It is simply not true that there are hundreds of ways to learn to read when it comes to reading we all have roughly the same brain that imposes the same constraints and the same learning sequence. Readers can use context to aid in comprehension, however using context is not HOW we learn to read. Students need to focus on the words and learn how to decode. English Language Learners likely will fall in the approximately 60% of children who require explicit and systematic instruction in all areas of literacy and language to learn to read. They need to learn how to decode words, not look at pictures to read a word. Pictures and other visuals are often used to help English Language Learners build vocabulary and other language skills. SSB 3069 doesnt state pictures can't be used to build vocabulary. Picture cues cant and shouldnt be used to read words.I encourage all legislators to set aside politics for the sake of Iowa children and vote in support of SSB 3069!Thank you for taking the time to read my comments. Stephanie Edgren

Name: Teri Patrick

Comment: I support this bill. We have lost a generation of readers because of reading methods adopted in schools a few decades ago the whole language and Lucy Calkins method. It was a miserable failure and we are suffering the consequences. I urge you to listen to "Sold A Story" to learn more about the history https://features.apmreports.org/soldastory/. My district, West Des Moines, reports 77% proficiency in reading with their elementary school proficiency scores of 55%, 62%, 2 schools at 65%, with the highest score of 75%. This is extremely concerning where a little less than half of the students are not proficient in reading (source IA DOE Website) In grades k3 kids learn to read, and 412 Kids read to learn. How can we expect students to be successful in the later grades if they have not mastered reading in the younger years. There have been countless studies on the lifelong impacts if kids do not learn to read in those early years. I spoke with an elementary school educator where Science of Reading was recently adopted and she said she was seeing outstanding growth in her students reading proficiencies. We owe it to the next generation to ensure we utilize teaching methods where kids are seeing successes, not only for reading but other subjects as well (language arts and math). I would also suggest we look at the writing programs as well "Problems With Lucy Calkins Curriculum Go Beyond ReadingTo Writing" https://www.forbes.com/sites/nataliewexler/2021/11/21/problemswithlucycalkinscurriculumgobeyondreadingtowriting/?sh=6d3b504050c9

West Des Moines Community School District – Iowa Department of Education

Total Students: 8,846 **Assessment data**: Grades 3-12

School	Percent Proficient English / Language Arts	Percent Proficient Mathematics	Overall Performance Rating
Clive Learning Academy	65.02	63	57.22
Crestview	55.68	52.57	54.42
Crossroads Park	74.2	78.98	60.33
Fairmeadows	72	75.67	57.2
Hillside	65.79	64.14	58.58
Jordan Creek	76.9	79.35	57.09
Western Hills	62.13	63.46	50.15
Westridge	75.58	83.55	58.67
Indian Hills Junior High	75.31	68.55	57.12
Stillwell Junior High	74.61	64.19	52.25
Valley Southwood 9th grade	76.28	59.06	54.19
Valley High School	77.3	68.33	59.26
Walnut Creek Campus	48.89	11.11	33.48
State Average	70.84	64.97	54.65
WDM District Overall	72.91	67.51	
# of students not proficient in district	1,589	1,909	

GRADUATION RATE (4 YEARS): 93.64%
GRADUATION RATE (5 YEARS): 95.80%

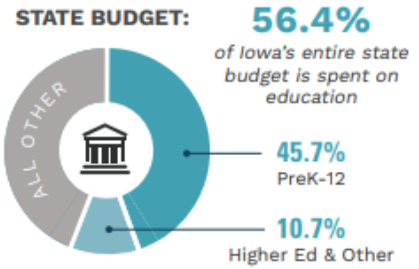
POST SECONDARY READINESS INDEX COMPOSITE: 51.31%
Post Secondary Readiness ACT/SAT: 48.21%
Post Secondary Readiness Career and Tech Ed: 41.76%

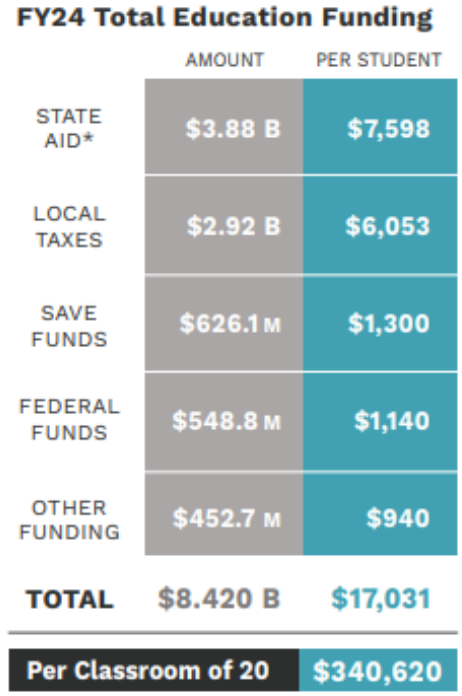
**While WDM has a high graduation rate, scores for post-secondary readiness are very low. Are we preparing our students for success after High School?*

SCAN TO SEE REPORT ON IOWA DOE WEBSITE

Source: https://www.iaschoolperformance.gov/ECP/StateDistrictSchool/DistrictSummary?k=8527&y=2022

SCHOOL FUNDING



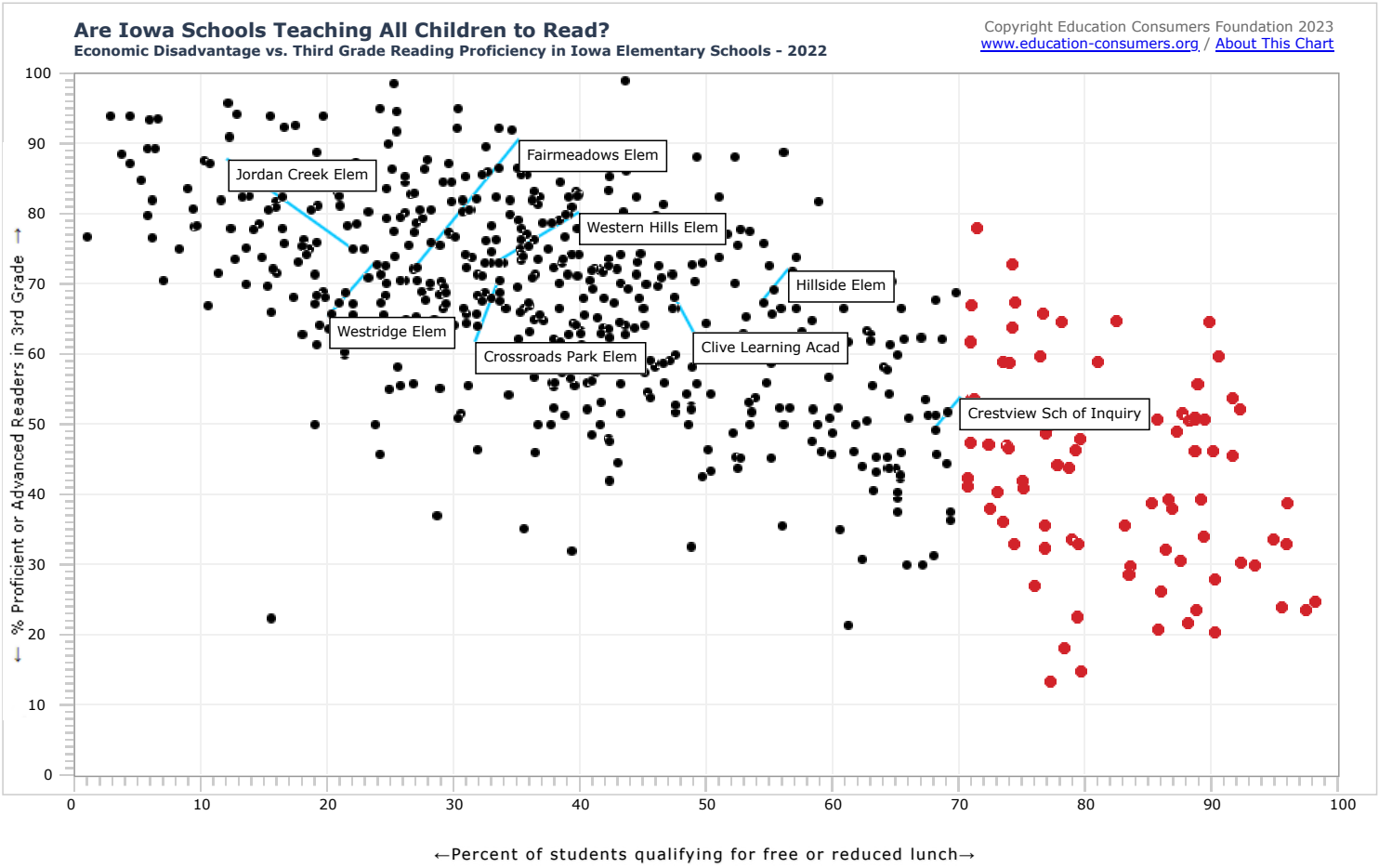


WDM TOTAL 2022
Total District Expenditures per Pupil

$19,711

Name: Teri Patrick

Comment: I support this bill Attached is some additional information on 3rd Grade proficiencies at the 3rd Grade level across Iowa:
https://educationconsumers.org/schoolperformanceiowa/


Are Iowa Schools Teaching All Children to Read?
Economic Disadvantage vs. Third Grade Reading Proficiency in Iowa Elementary Schools - 2022
Copyright Education Consumers Foundation 2023
www.education-consumers.org / About This Chart
Jordan Creek Elem
Fairmeadows Elem
Western Hills Elem
Hillside Elem
Westridge Elem
Crossroads Park Elem
Clive Learning Acad
Crestview Sch of Inquiry
% Proficient or Advanced Readers in 3rd Grade
←Percent of students qualifying for free or reduced lunch→

Name: Papae Wymore

Comment: I am in full support of this bill. I am a professor teaching literacy courses and other education courses. My journey and knowledge of the science of reading stems from my husband having dyslexia and not being diagnosed or taught in a way that met his needs. While he is successful and a proficient reader, his Iowa teachers did not know how to instruct him. Many years ago, I taught kindergarten in Iowa and was given materials to teach 3 cueing strategies. At the time, I did not know the harm in that as I was not taught evidencebased practices at my Iowa teacher prep school. This bill must state that reading instruction shall NOT include approaches that are designed to teach students to read based on meaning drawn from context, structure and syntax, visual cues, and pictures, including the instruction model commonly known as the threecueing system. This language will be helpful for teachers and school administrators to understand. I am hearing many comments that some think that the science of reading is a program, but it is not! Please see the attached document describing what the science of reading is and is not.

The Science of Reading

A Defining Movement

SCIENCE OF READING

DEFINING GUIDE

Preamble

Humankind's most precious treasure is our children, and our future depends on them. We recognize literacy as a fundamental human right that empowers individuals in a society. We also know that grim life outcomes are connected to illiteracy. We are resolved to prevent the collateral damage that is incurred by our students, especially the most vulnerable among them, when adults have limited access to the convergent scientific evidence.

Research has identified assessment and instructional practices with which every teacher and leader should be equipped. We believe that providing educators with this knowledge is a moral imperative. We are committed to evidence-aligned reading instruction being scaled with a sense of urgency in a comprehensive and systematic way by multiple stakeholders.

We know that our children can be taught to read properly the first time. In a knowledge economy, the currency of the 21st century will be built on the foundation of skilled reading. Students who can read well have a place at the table of opportunity whether their aspirations lead them to preparation for college or the workforce.

We believe in a future where a collective focus on applying the science of reading through teacher and leader preparation, classroom application, and community engagement will elevate and transform every community, every nation, through the power of literacy.

Rationale for Promoting a Common Definition of the Science of Reading

Although the scientific evidence base for effective reading has existed for decades, the term "the science of reading" has gained traction in the last few years, potentially leading to misunderstandings. As a result, we believe that a common definition is useful for the field.

A Common Definition Will:

- Support educators and parents as they discern what is and what is not in alignment with the science of reading.
- Assist people in becoming informed and wiser consumers of instructional materials, professional development, and resources.
- Impact publishers' and policy makers' decisions as they develop materials and policy guidelines.
- Guide people in the true educational transformation needed for sustainable change to effective practice.
- Unify the effort of all stakeholders on behalf of students to ensure the advancement of educational equity.

The Definition

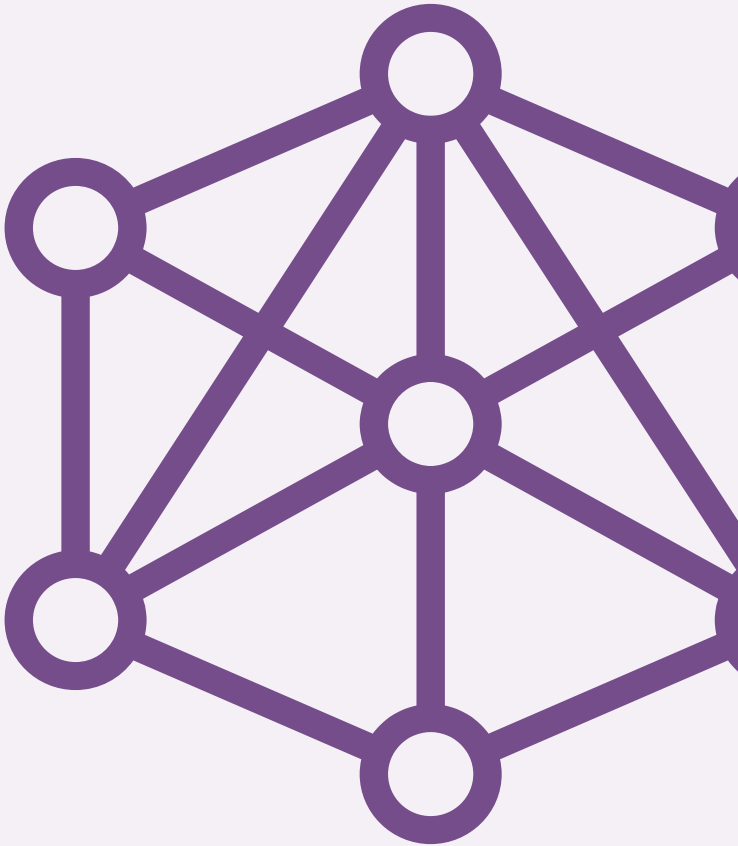
The **science of reading** is a vast, interdisciplinary body of *scientifically-based** research about reading and issues related to reading and writing.

This research has been conducted over the last five decades across the world, and it is derived from thousands of studies conducted in multiple languages. The science of reading has culminated in a preponderance of evidence to inform how proficient reading and writing develop; why some have difficulty; and how we can most effectively assess and teach and, therefore, improve student outcomes through prevention of and intervention for reading difficulties.

* See the chart on page 11 for a better understanding of what is meant by scientifically-based research

The Science of Reading is Derived From Researchers in Multiple Fields:

- Cognitive Psychology
- Communication Sciences
- Developmental Psychology
- Education
- Special Education
- Implementation Science
- Linguistics
- Neuroscience
- School Psychology



What the Science of Reading is **NOT**

- an ideology or philosophy
- a fad, trend, new idea, or pendulum swing
- a political agenda
- a one-size-fits-all approach
- a program of instruction
- a single, specific component of instruction, such as phonics

Findings From *Scientifically-Based Research* Are Best Able To Inform Effective Instruction

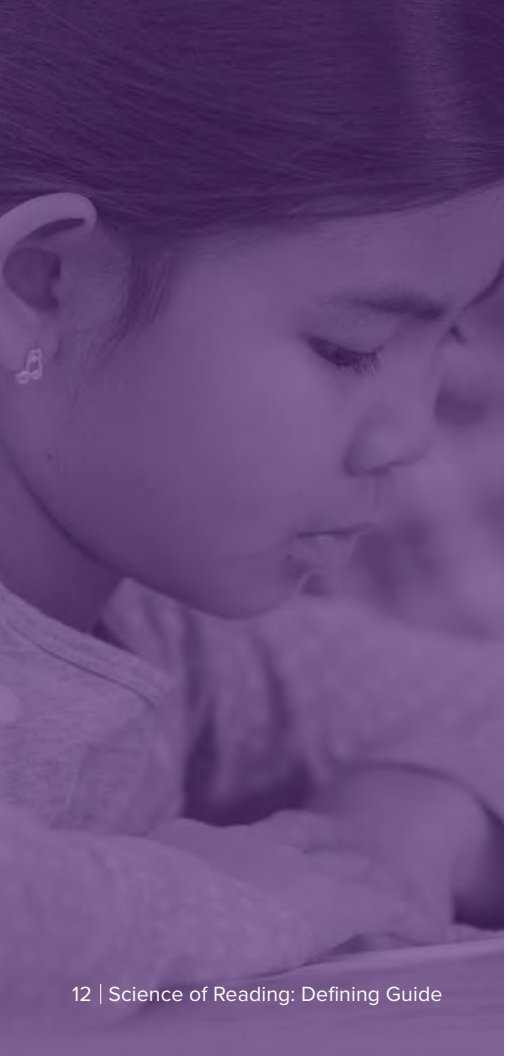
The type of question being asked determines the method/approach of research. While questions about the causal relationships between instruction and student outcomes that comprise the science of reading are best answered with experimental or quasi-experimental research designs, other methodologies (e.g., qualitative studies, brain imaging studies, correlational studies, observational studies, meta-analyses) are useful when the research questions are not seeking to address causal claims.

> *"Teachers can benefit by understanding two things about research and causal inferences. The first is the simple (but sometimes obscured) fact that statements about best instructional practices are statements that contain causal claims. These statements claim that one type of method or practice causes superior educational outcomes. Second, teachers must understand how the logic of the experimental method provides the critical support for making causal inferences."*

Stanovich, P. J. & Stanovich, K. E. (2003). *Using research and reason in education: How teachers can use scientifically based research to make curricular & instructional decisions*. National Institute of Child Health and Human Development; Department of Education; and Department of Health and Human Services.

* Scientifically-based research includes the components described in the table below.

REQUIRED COMPONENTS	DEFINITIONS	WHY IMPORTANT
Study design that is experimental or quasi-experimental. These designs specifically answer questions about why individuals have difficulty learning to read and write, as well as which practices are effective.	**Experimental** design features one or more experimental groups and at least one comparison group. Participants are randomly assigned to groups. **Quasi-experimental** design does not utilize random assignment. Participants are sometimes compared to groups with similar profiles.	Experimental and quasi-experimental designs allow researchers to determine if a particular variable being studied is the reason for improved outcomes. Random assignment, recognized as the gold standard, provides a clearer link between cause and effect because it helps control the effects of variables other than the experimental treatment. This allows for greater confidence that the treatment is what led to improved outcomes.
Detailed description of study methods and population for replication, generalizability, or refinement of findings.	To have confidence in findings, a convergence of evidence is needed. Detailed descriptions regarding design, participants, settings, instructional practices, measurements, and outcomes must be provided to replicate the study (i.e., conduct another study in a similar manner). Generalizability is the extent to which the findings of a study would be expected in real-world contexts.	It is important to show that scientific findings are unbiased and to determine for whom and under what conditions positive outcomes are produced. Replication is what leads to a large body of studies with similar results so that we can: **a.** Conclude findings are consistent (e.g., “on the right road”) **b**. Conclude findings are not consistent (e.g., more research needed) **c.** Discover new questions to be studied Clear descriptions of the context in which the study was conducted, the resources involved, and the participants allow readers to evaluate whether similar findings might be expected in their situations.
Publication in a **peer-reviewed** (refereed) journal.	**Peer-reviewed** journals provide a rigorous review by multiple independent scientists with relevant expertise.	**Peer review** is a “quality check” prior to publication to ensure the study and its outcomes were designed, executed, and described properly. It provides integrity to the body of studies that make up the science of reading.



Reading Processes, Reading Development, and Instructional Practices: An Introduction

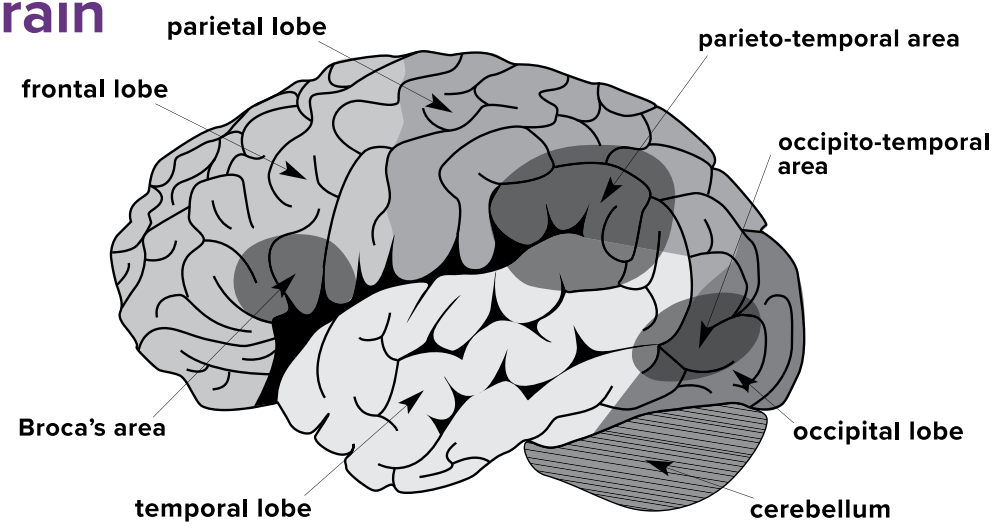
> *Research in reading should follow the norms of science. Each researcher must try to learn from the work of those who preceded him and to add to a unified body of knowledge.*
>
> (Chall, 1967, p. 314).

As with any body of knowledge derived from science, the body of scientifically-based reading research builds and advances over time. It has provided us with information about reading development, reading processes, and reading instruction.

Interdisciplinary findings converge to refine and confirm existing findings, adding strength and validity. In contrast to basing reading instruction on theories or philosophies, knowledge of the large body of scientific research called the science of reading allows practitioners to select and implement practices about reading that will be the most effective for the most students.

Reading Processes: What the Science of Reading Reveals About How Reading is Processed in the Brain

In recent years, our knowledge of how the brain acquires the skill of reading has evolved. We now have a deeper understanding of how the brain processes multiple sources of information while reading. Brain researchers have identified areas and networks of the brain involved in processing print, speech sounds, language, and meaning.

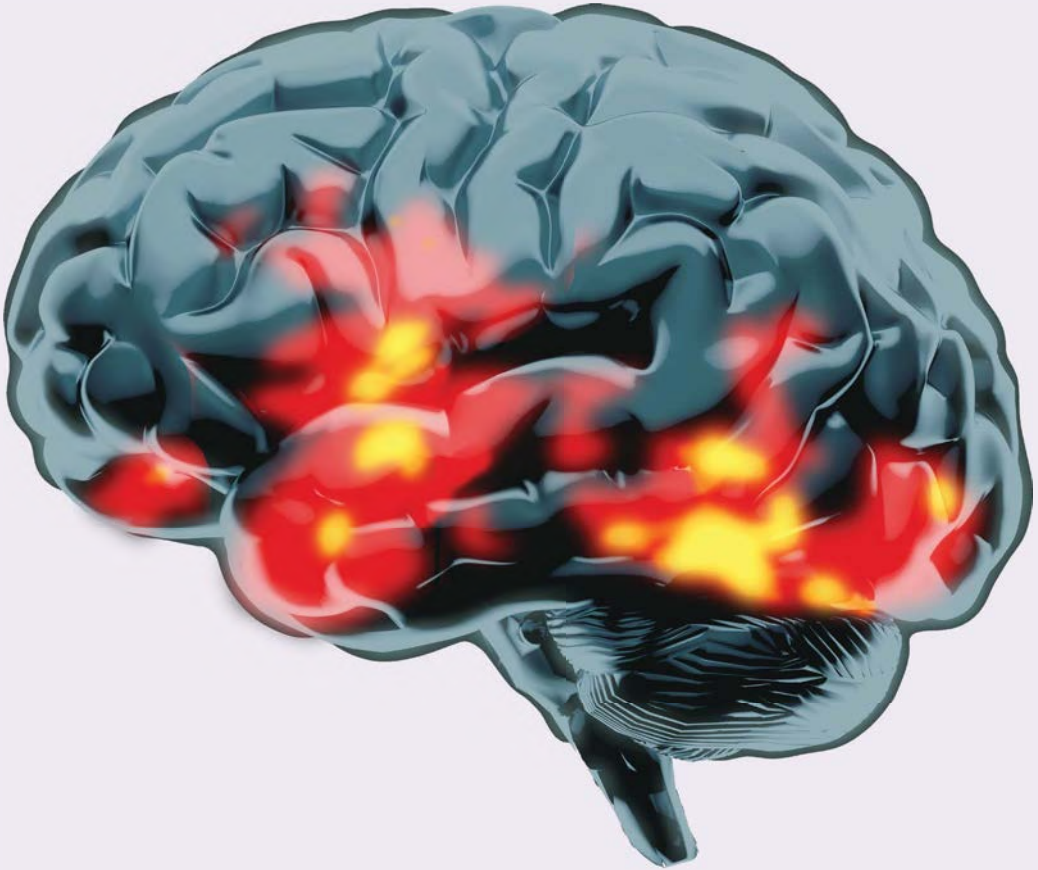


Since neural connections required for reading do not exist between these areas in the pre-literate brain, efficient pathways are built with explicit instruction and deliberate practice. This instruction has a significant influence on building these networks, over and above "immersion" and instruction that is not explicit.

Educators who are knowledgeable about the necessary connections between the pronunciation of the spoken word, the sequence of letters in the printed word, and the meaning of the word, can implement reading instruction and assessment that promotes the level of automatic word recognition that is necessary for deep processing of the meaning of texts.

TO LEARN MORE:

- Watch the first 15 minutes of: **How the Brain Learns to Read - Prof. Stanislas Dehaene**.
- See pages 21-32 in **Learning to Read: A Primer | Part One** for an illustration of a time-lapse of fMRI brain images representing the language processes that operate during both reading and speaking.



Reading Development: What the Science of Reading Discovered About How Skillful Reading Develops

To understand how a student develops into a skillful reader (i.e., a fluent reader who can comprehend text), we look toward two theoretical frameworks aligned with science. We encourage all stakeholders to familiarize themselves with these frameworks as they should be used to inform reading assessment and instruction.

SIMPLE VIEW OF READING

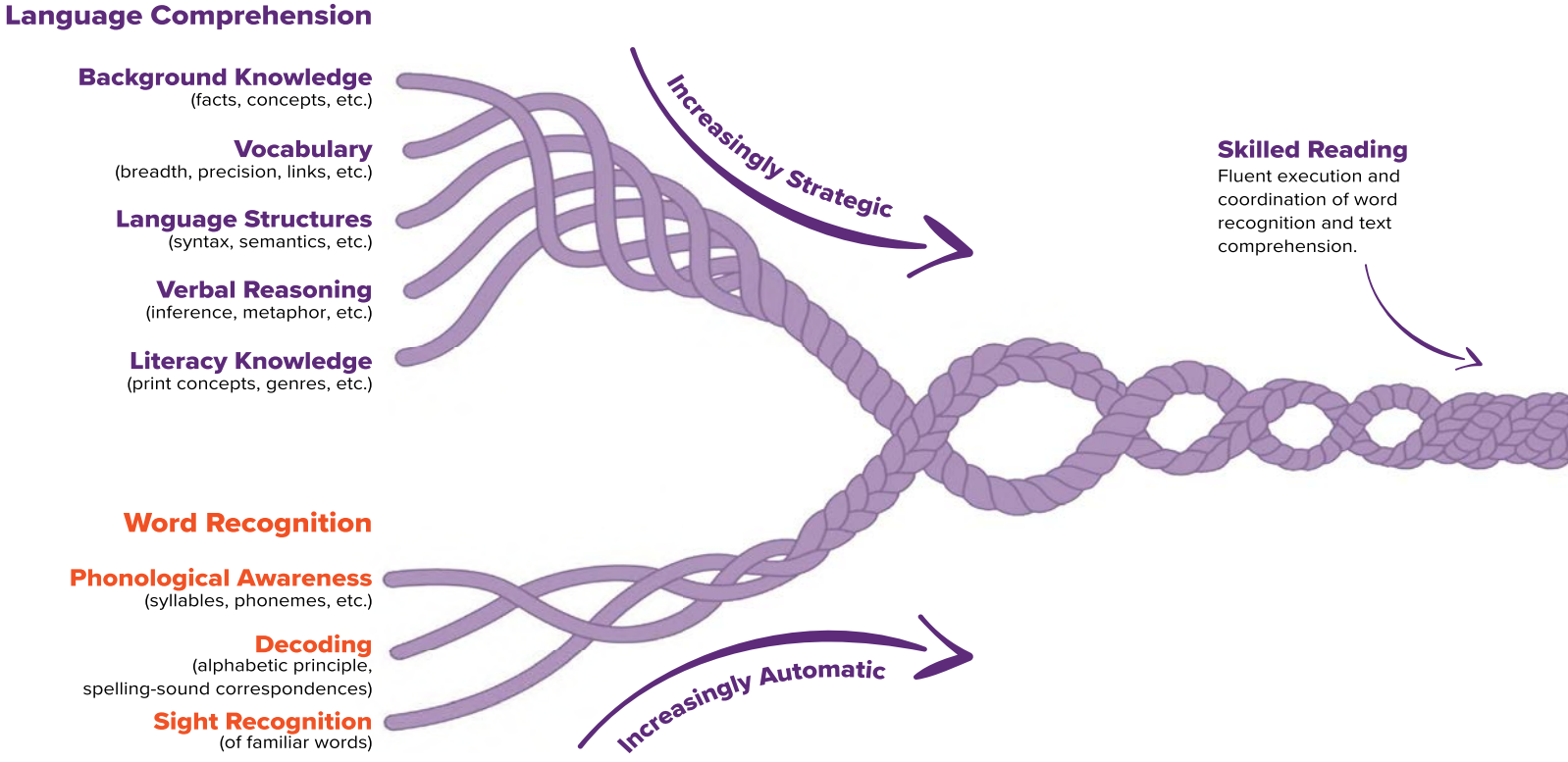
The Simple View of Reading has been empirically validated by over 150 scientific studies. It shows us that reading comprehension is not the sum, but the product of two components - word recognition and language comprehension - such that if either one is weak, reading comprehension is diminished. No amount of skill in one component can compensate for a lack of skill in the other. While it is a simple view of a developmental process, skilled reading development is NOT simplistic. For a more in-depth understanding of the subcomponents within word recognition (WR) and language comprehension (LC), we turn next to Scarborough's Reading Rope.

Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10.

SCARBOROUGH'S READING ROPE

Scarborough's Rope is a visual metaphor for the development of skills over time (represented by the strands of the rope) that lead to skilled reading.

Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), *Handbook for research in early literacy,* (pp. 97-110). Guilford.



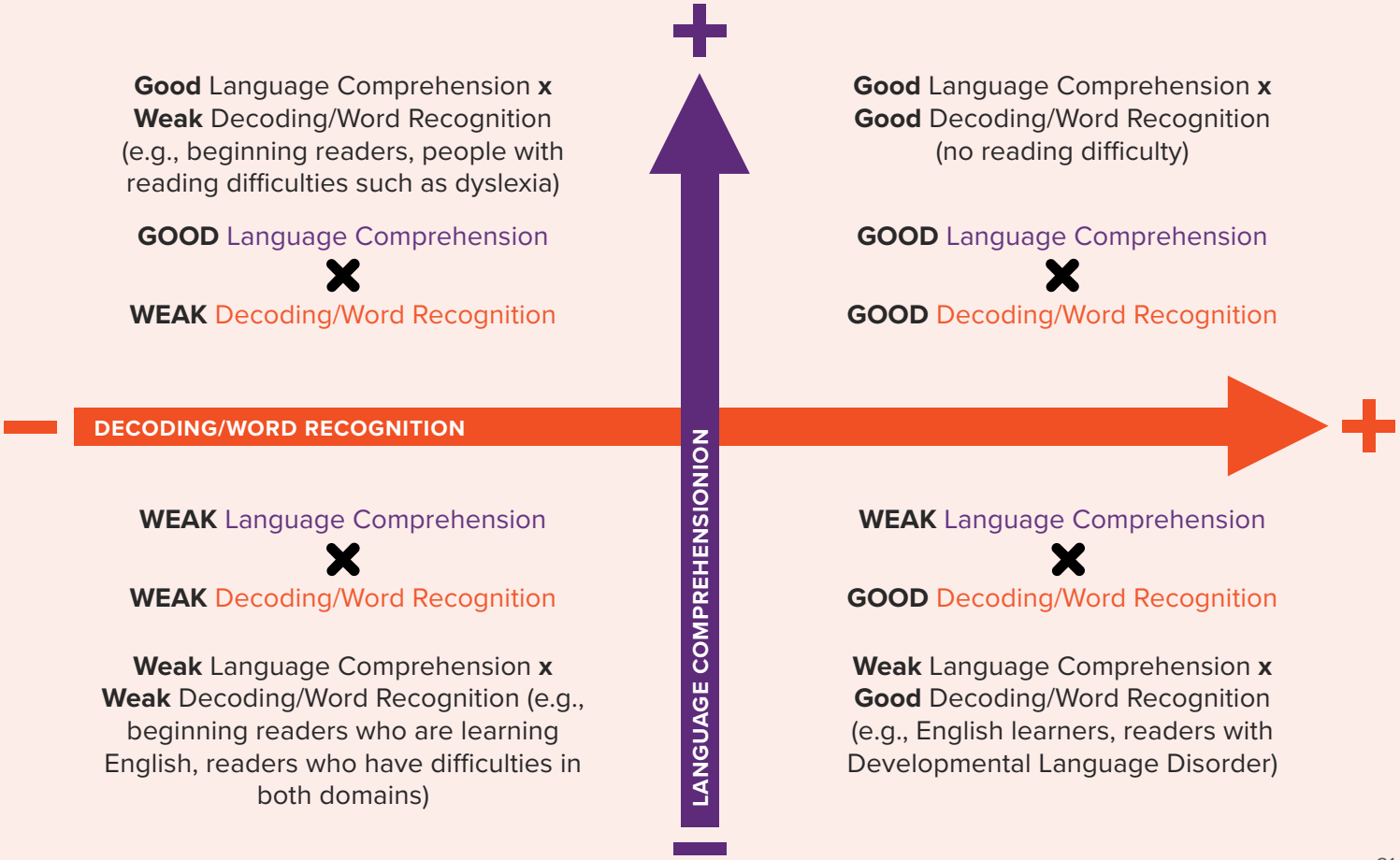
The Reading Rope (Scarborough, 2001)

Patterns of Reading Skills Derived From the Science of Reading Inform Instruction for *All* Learners

The Simple View of Reading allows us to recognize patterns of reading skills in both word recognition/decoding and language comprehension. Knowing where learners fall on the continuum of reading patterns depicted on the next page provides insight into the reasons for the reading difficulty and where to focus instruction.

Based on the Simple View of Reading, each of the three patterns in which there is a weak area will result in diminished reading comprehension. Universal screening and diagnostic assessment data must inform student strengths and needs that then become the focus of instruction and intervention.

See Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10.


Good Language Comprehension **x**
Weak Decoding/Word Recognition
(e.g., beginning readers, people with reading difficulties such as dyslexia)
GOOD Language Comprehension
WEAK Decoding/Word Recognition
Good Language Comprehension **x**
Good Decoding/Word Recognition
(no reading difficulty)
GOOD Language Comprehension
GOOD Decoding/Word Recognition
DECODING/WORD RECOGNITION
LANGUAGE COMPREHENSIONION
WEAK Language Comprehension
WEAK Decoding/Word Recognition
Weak Language Comprehension **x**
Weak Decoding/Word Recognition (e.g., beginning readers who are learning English, readers who have difficulties in both domains)
WEAK Language Comprehension
GOOD Decoding/Word Recognition
Weak Language Comprehension **x**
Good Decoding/Word Recognition
(e.g., English learners, readers with Developmental Language Disorder)

Instructional Practices Aligned With the Science of Reading: Word Recognition

The following is a *sampling* of instructional practices for word recognition. It is not an exhaustive list.

Examples of instructional practices aligned with findings from the scientific evidence base:

- Phonemic awareness and letter instruction: Instruction in the identification of phonemes in spoken words and how they link to letters.
- Explicit and systematic instruction in how to decode (read) and encode (spell) words, including word part analysis (e.g., syllables, morphemes).
- Connected text reading to build reading accuracy automaticity, fluency, and comprehension.

Examples of instructional practices NOT supported by scientific evidence:

- Emphasis on larger units of speech (syllables, rhyme, onset-rime) rather than individual phonemes.
- Implicit and incidental instruction in word reading, visual memorization of whole words, guessing from context, and picture cues.
- Emphasis on speed or words per minute over accuracy when reading texts (practiced with reading of patterned texts or sustained silent reading for all students).

Instructional Practices Aligned With the Science of Reading: Language Comprehension

The following is a *sampling* of instructional practices for language comprehension. It is not an exhaustive list.

Examples of instructional practices aligned with findings from the scientific evidence base:

- Read-alouds from a variety of complex texts to build knowledge and vocabulary.
- Robust conversations to develop students' academic language (e.g., narrative and inferential language).
- Explicit instruction in grammatical structures and academic vocabulary within the context of other reading activities.

Examples of instructional practices NOT supported by scientific evidence:

- Read-alouds from leveled texts that students will be reading so that text is not sufficiently complex.
- A lack of explicit instruction of morphology, memorization of isolated words and definitions out of context, and a lack of strategic and intentional instruction.
- Implicit instruction of grammatical structures.

The Science of Reading Includes Learners with Linguistic Differences

Educators supporting students with linguistic differences such as multilingual learners (MLLs), English learners (ELs), and speakers of English language variations can rely on the science of reading and the conceptual frameworks highlighted in this guide. These students benefit from the practices derived from the science of reading. All proficient readers must master the same concepts in order to learn to read. However, it is important to provide students with linguistic differences a focused attention on oral language development.

> *"Both English literacy and English oral language proficiency must be priorities if these students are to have adequate and equitable opportunities for success in school and beyond."*

(Goldenberg, 2020: bit.ly/Goldenberg2020RdgWarsRdgScienceEngLearners).

> *"The linguistic differences that children bring with them to school should be viewed positively in classrooms and used as strengths to leverage performance in literacy."*

B Gatlin-Nash, L Johnson, R Lee-James. International Dyslexia Association: *Perspectives on Language and Literacy*, 28-35, 2020.

> *"ELs benefit from reading instruction that includes phonemic awareness, phonics, fluency, vocabulary, and text comprehension. Adjustments are necessary, however. One of the major adjustments includes a focus on oral language proficiency, which is often overlooked during instruction."*

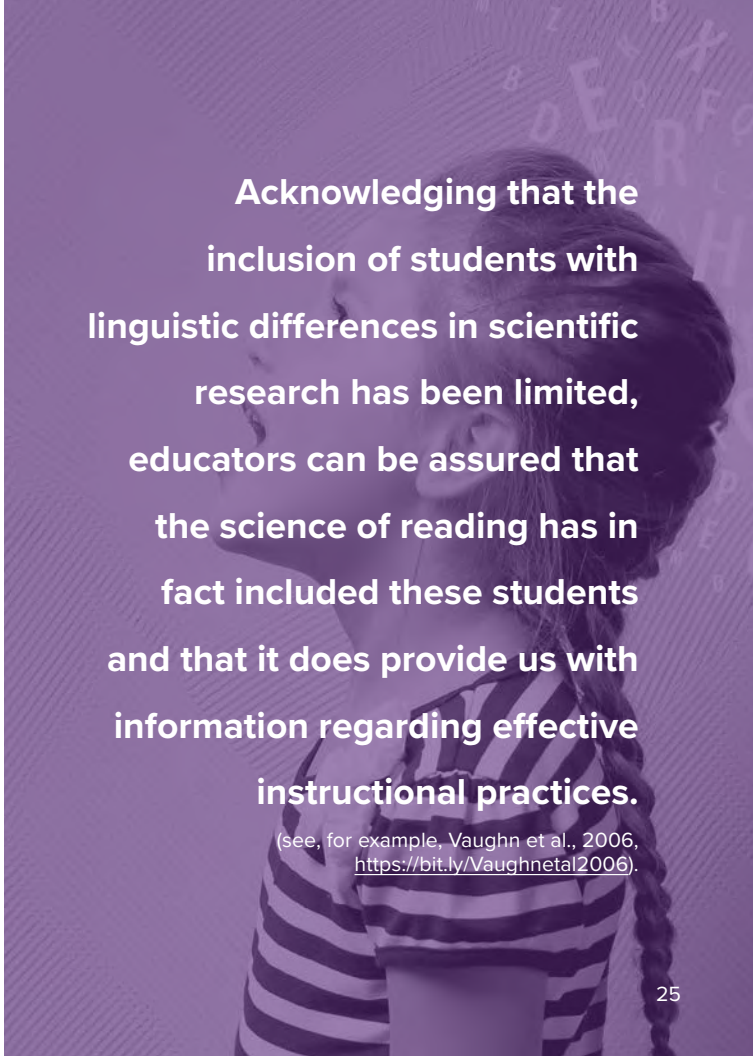
(Cárdenas-Hagan, 2020, p. 38: https://bit.ly/Cardenas-HaganText).

Additional Resources:

ASHA Phonemic Inventories and Cultural and Linguistic Information Across Languages

Gatlin-Nash, Johnson, & Lee-James (2020)

Seidenberg & Washington (2021)



Acknowledging that the inclusion of students with linguistic differences in scientific research has been limited, educators can be assured that the science of reading has in fact included these students and that it does provide us with information regarding effective instructional practices.

(see, for example, Vaughn et al., 2006, https://bit.ly/Vaughnetal2006).

MTSS: A Framework to Improve Reading Outcomes Through Prevention and Intervention

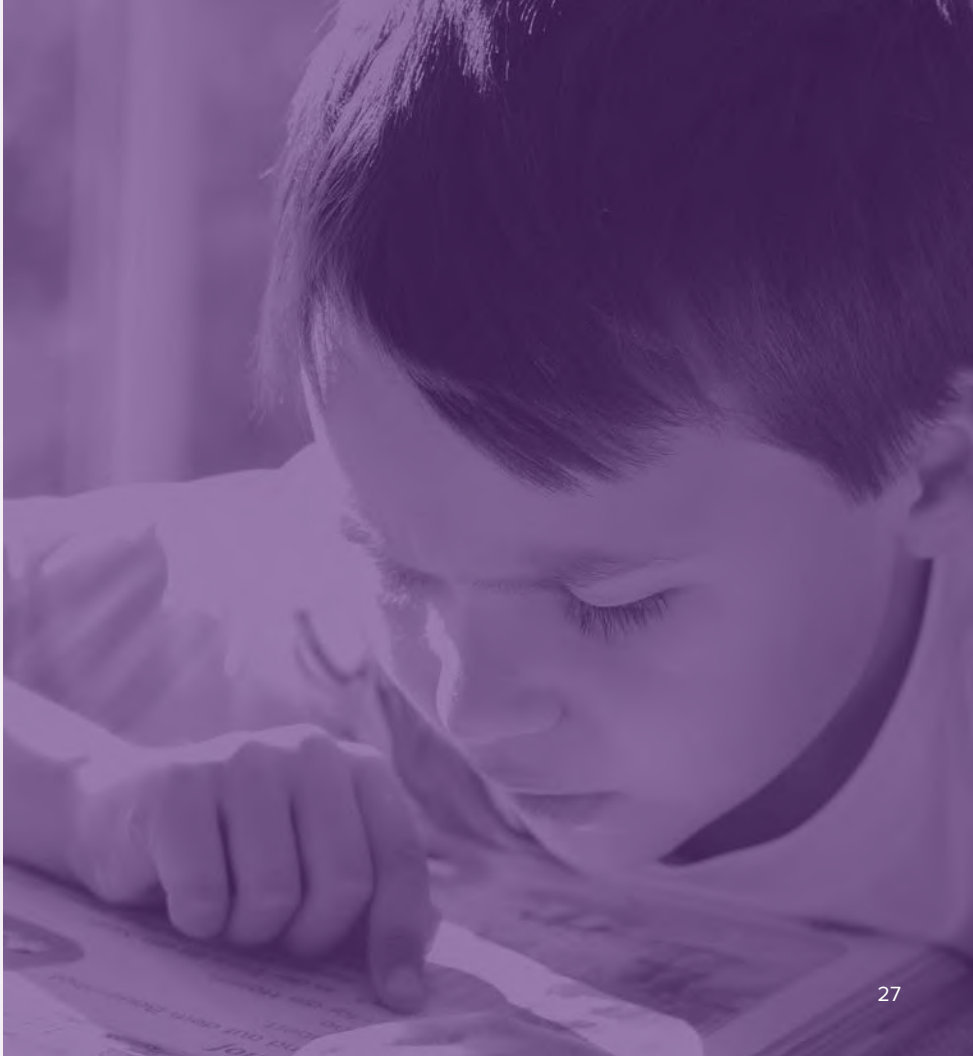
Multi-Tiered Systems of Support (MTSS) is a school-wide framework for implementing effective instruction. MTSS involves efficiently targeting instruction to student needs based on universal screening and diagnostic assessments.

School and district teams use assessments in a data-based, decision-making process to build a system of increasingly intensive instructional supports that are customized to fit the needs of the students. Simultaneously, schools must also assess their human and instructional resources to ensure that those needs are met.

MTSS does not involve prescriptive practices to be rigidly implemented by tiers or levels of assignment. Nor is it adding to current, ineffective practices for the sake of innovation. It is a comprehensive system whereby ineffective practices are strategically abandoned and proven practices are prioritized.

By focusing first on meeting the needs of the vast majority of students through an effective system of universal, core instruction, more intensive and specialized resources such as funding, instructional minutes, and educator capacity are available to serve students with complex reading needs.

Rather than waiting for students to fall behind before providing reading support, the MTSS model provides the early identification of risk and immediate instructional response that improves student outcomes through prevention of and intervention for reading difficulties.



Calls to Action for All Stakeholders

We call on **educators** to embrace opportunities to learn about the science of reading, reflect upon their practice, and challenge approaches to reading instruction that are not aligned with the scientific evidence.

We call on **district and school administrators, school boards, and school committees** to prioritize professional development on the science of reading for themselves and for educators and to provide the necessary support (e.g., coaching) to adopt evidence-aligned assessments, resources, and instructional practices.

We call on **state departments of education** to collaborate with experts in the science of reading to design responsible rollouts of integrated initiatives based on the findings from the science of reading and to prioritize leadership preparation to support teacher implementation of evidence aligned practices (e.g., educator standards, licensing exams).

We call on **schools of education** to align coursework with the science of reading and to foster interdisciplinary collaboration between professors of education and professors of cognitive psychology, neuroscience, speech and language studies, linguistics, and related fields.

We call on **pediatricians** to prioritize the screening of early speech and language developmental milestones to identify red flags for future reading difficulties.

We call on **curriculum publishers and professional learning providers** to create and promote products that are aligned with the science of reading, and to eliminate non-aligned products from their offerings.

We call on **federal agencies and private foundations** to continue to fund research on issues and questions critical to better understanding reading development, reading difficulties, and the most effective forms of instruction.

We call on **policymakers** to develop solutions that prioritize the acquisition and application of the science of reading in schools, and ensure that they are supported by realistic timelines and resources.

We call on **professional literacy associations** to provide learning opportunities and resources aligned to the science of reading.

We call on **reading scientists** to continue to investigate critical questions related to the science of reading, to translate important findings to practitioners in terminology that is readily applicable to their practice, and to actively seek outlets in which a direct partnership between scientists and educators can be developed.

We call on **parents and caregivers** to take an active part in ensuring schools and school systems are utilizing literacy practices aligned with the science of reading.

Being Good Citizens of a Science and Practice Community

- **Disagree respectfully**. Debate is a sign of a healthy scientific community. Science advances through questions and challenging previous conclusions. Acknowledge differences and discuss them with respect and decency.
- **Recognize the fallibility of anecdotes and personal experiences**. Our experiences were the product of the unique contexts in which they occurred. Personal experience and anecdotal observations should not outweigh findings of high-quality research.
- **Fairly evaluate all evidence**. Apply healthy critique to all studies, regardless of whether the conclusions are inconsistent with your beliefs.
- **Identify best practices from multiple studies**. Identifying "what works" comes from a body of high-quality studies.
- **Dig deeper and seek clarification**. Look closely at the sources that researchers, presenters, or program vendors cite as support. When needed, ask them for clarification.
- **Have courage to reconsider**. Be willing to change beliefs or practices in light of new evidence.
- **Self-critique**. Reflect on the ways you use and interpret evidence. Acknowledge when your understanding is incomplete, and invite feedback from others on your interpretation of research.
- **Examine and disclose conflicts of interest**. A researcher, presenter, or program developer should disclose when they profit from the use of a program or materials. A potential conflict of interest demands greater scrutiny of their claims.
- **Base decisions on quality of evidence, not popularity**. The popularity of an author or presenter should not be an indicator of the validity of their recommendations, nor should the popularity of a program be a reason to use it.

By Nathan Clemens (See Clemens, N.H., Powell, S.R., & Vaughn, S. (2021). A special educator's guide to evidence.)

In Conclusion: An Equity Statement

We believe that literacy success for all is the **defining human right** of the 21st century, regardless of zip code, ethnic origin, dialect, or language. We urge you to join us by insisting that all children are afforded instruction that prepares them to read and write at proficient and advanced levels. Children who are skilled readers and writers will be **empowered by their literacy** and will refuse to be defined by the low expectations of others.

We extend our deepest gratitude to the dedicated advocates of this Defining Movement. Together, we can elevate the stories of lives that have been dynamically altered through our **united commitment to improving literacy narratives using evidence-based practices**. Our children are worth the labor of pressing through the unknown, holding challenging conversations with high expectations, and even failing forward while building expertise.

Let us learn from the broken systems that have perpetuated unacceptable inequities, and forge ahead so that underserved families experience a **new social contract** that guarantees reading success for all. Families must be able to expect that when they send their children to school, they will learn to read at proficient and advanced levels.

Let us galvanize a critical mass of stakeholders who anchor their work in science through a commitment to deep, systemic, and non-negotiable transformation.

Together, we can create equitable access to literacy practices that are grounded in the science of reading for the sake of today's children, and generations to come.

The Defining Movement Coalition

The Defining Movement Coalition came together from September 2020 - July 2021 on a weekly basis to build the contents of this Defining Guide. The generosity they extended in terms of time and expertise stemmed from their desire to ensure that the findings from the science of reading are widely understood by all stakeholders. We hope this guide will assist practitioners and others to implement these findings in ways that will result in the same gap-closing outcomes so many scientific reading researchers achieved in their work.

Thank you to all. You are so valued.

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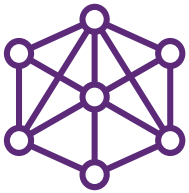
Tracy Weeden, Ph.D., President and CEO, Neuhaus Education Center

Liz Woody-Remington, Co-Founder of The Learning Alliance and Director of Professional Development

The Reading League (TRL) is a national education nonprofit led by educators and reading experts dedicated to promoting knowledge to reimagine the future of literacy education and accelerate the global movement toward reading instruction rooted in science. Our purpose is to increase knowledge of science-based approaches to teach reading as well as research that demystifies how people learn to benefit the lives of millions of students. We train and support educators and school leaders. By extension, we also serve parents, specialists, and researchers. We believe all children can learn to read and all teachers can learn to teach them.

thereadingleague.org



The Science of Reading

A Defining Movement

The Science of Reading: A Defining Movement was developed by The Reading League.

- All voices are needed to protect the science of reading.
- A worldwide commitment to understanding the science of reading ensures it is not misunderstood or minimally applied.

ACTION YOU CAN TAKE:

- **Join our community**
- Promote the science of reading in your work
- Share this book with colleagues

Use this space to define how you will commit to this movement:

How to cite the Defining Guide according to APA (7th edition):

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Subsequent text citations: (TRL, 2022)

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Digital copy:

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Subsequent text citations: (TRL, 2022)

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The Reading League. (Year, Month, Day). *Science of Reading: Defining Guide*. https://www.thereadingleague.org/what-is-the-science-of-reading/

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The Science of Reading

A Defining Movement

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