



## Literacy Faculty Response to “the Science of Reading”

### Introduction

With this brief, we — Minnesota State University, Mankato’s (MNSU) Literacy Education faculty — offer a research-based response to current “Science of Reading” (SOR) lobbying and proposed legislation ([HF 629](#)) that threatens to de-professionalize Minnesota teachers and divert state public-education dollars to private, corporate-backed entities.

While we agree with some points made by SOR proponents, for example that phonemic awareness is a key element in early literacy acquisition, we strongly disagree with this lobby’s narrow and selective reliance on quantitative research and standardized test scores in making its recommendations. Moreover, we object to this lobby’s political alignment with privatized interests currently working to dismantle public education and undermine teaching for critical citizenship and strong democracy. We agree that the opportunity gap in literacy education must be addressed, yet we do not support initiatives that undermine fundamental aspects of equitable literacy instruction.

Our hope is that Minnesota state educators and legislators will look carefully into misleading SOR claims in order to avoid being persuaded to waste further resources, including taxpayer dollars, on expensive literacy materials and training regimens designed to benefit private interests, most prominently those represented by Lexia Learning and its parent company Cambium Learning Group Inc. which recently received a \$2.2 billion direct loan from Blackstone Group Inc. (Lee & Raimonde, 2021).

To that end, our brief focuses on three misleading claims currently driving the SOR narrative:

- 1) There is a crisis in K-12 Minnesota reading pedagogy and outcomes (test scores) that can only be rectified through the proliferation of SOR curricular materials and frameworks;
- 2) The SOR research base provides “proven” solutions to the alleged statewide reading crisis; and
- 3) SOR’s back-to-basics pedagogy provides the most “appropriate” approach to reading today for all Minnesota students (“The Science of Reading,” n.d.).

Below, we address each of these claims in turn:

# 1. There is a crisis in state reading outcomes that can only be rectified with SOR curriculum.

Example Claim: “When 60% of Minnesota students do not read at grade level, this problem is not just a dyslexia problem. During the 2021 Minnesota Legislative Session, the bill that we supported passed, allocating \$3 million toward providing LETRS training for Minnesota teachers. (LETRS training aligns with the science of reading, is scalable and cost effective for schools).” (“The Science of Reading,” n.d.).

Response: There is no statewide crisis in K-12 reading. Claims such as the one above by the Dyslexia Institute of Minnesota are often made without reference to the source of information or the methods by which a measure like 60% below grade level has been determined.

- The Minnesota Department of Education (MDE) claims to release MCA “test results” every year; however, test scores are never actually reported. Because of changes in the MCA and MTAS test, the MDE advises that year-to-year comparisons not be made. Instead, students’ results are put into four arbitrarily defined categories: (a) exceeds the standards (proficient), (2) meets the standards (proficient), (3) partially meets the standards (not proficient), and (4) does not meet the standards (not proficient). Results are reported in terms of percentages in each category. Hence, they do not compare test scores; rather, they compare percentages in the four arbitrarily defined categories.
- By contrast, National Assessment of Educational Program (NAEP) results are comparable from year-to-year and from state-to-state (NCES, 2023). Minnesota reading scores have always been above the national average (see Figures 1 and 2). The drop in scores from 2019 to 2022 reflects the expected pandemic fluctuation.

**Figure 1. NAEP average 4<sup>th</sup> grade reading scores.**

	1998	2019	2022
Minnesota Average	222	222	216
National Average	215	219	215

**Figure 2. NAEP average 8<sup>th</sup> grade reading scores.**

	1998	2019	2022
Minnesota Average	265	264	260
National Average	261	262	259

- SOR’s recommended curriculum consists of prescribed approaches that focus on scripted, direct instruction of low-level skills. While these methods may be effective in producing higher test scores on low-level skills in the short term, they do not transfer to effectiveness supporting the higher-level skills involved in reading comprehension, nor do they inspire children to be lifelong readers (Epply & Dudley-Marling, 2018).

## 2. The SOR research base provides “proven” solutions to the alleged reading crisis.

Example Claim: “The body of research evidence known as the Science of Reading is comprised of more than 40 years of research into how we learn to read. Additionally, the body of research that provides the foundation for the Science of Reading consists of analyses of the instructional practices that have been repeated and validated consistently, over time, with proven results” (“The Science of Reading,” McGraw Hill).

Response: By privileging a singular methodology (i.e., controlled-experimental), SOR research overlooks significant social and cognitive complexities involved in reading and discounts countervailing findings derived from other valid and reliable research methodologies (Soler, 2017; Yaden, et al., 2021).

- SOR research asserts one exclusive way of determining causality and making claims as to what constitutes knowledge. SOR’s favored controlled-experimental approach reflects a mechanistic paradigm that, when applied to human behavior, erroneously reduces social phenomena to sets of controllable variables (Soler, 2017).
- SOR looks only to controlled-experimental studies that support using the phonological processing model, resulting in a body of research that merely affirms SOR advocates’ pre-existing assumptions.
- This narrow view of what counts as “the science” of reading disregards much of what is known about “how reading operates, develops, is taught, shapes academic and cognitive growth, affects motivation and emotion, interacts with context... [because] it includes genetic, biological, environmental, contextual, social, political, historical, and cultural factors that influence reading” (Graham as cited in Goodwin and Jimenez, 2020, p. 58).
- SOR’s favored instructional method — the phonological processing model — is sometimes referred to by researchers as “the simple view of reading” for its understanding of reading as merely the sounding out of words (Cervettie, et al., 2020; Duke & Cartwright, 2021; Hoffman, 2017). While sounding-out-words instruction has its place for setting a foundation for reading, it does not turn out to be equally beneficial for all learners, nor does it speak to the higher-order thinking learners need for reading complex texts and our complex world (Lipson & Wixson, 2009).
- Overemphasis on phonics has been demonstrated to create misunderstandings regarding the purpose of reading for young readers (Smith, 2006). While a singular focus on direct phonics instruction may promote knowledge of phonics, the imbalance in phonics

instruction over meaning-based approaches may simultaneously remove reading from the authentic contexts where children do not just learn to read words but read for meaning and keep reading central in their lives for authentic purposes.

- SOR’s privileging of phonics instruction can actually harm multilingual learners’ literacy acquisition by ignoring their native phonemic systems as it doubles down on methods presumed to be equally beneficial for all (Johnston & Scanlon, 2020; Luke, 1995).

### **3. SOR’s back-to-basics pedagogy – where “everything old is new again” – provides the most “appropriate” approach to reading today for all Minnesota students.**

Example Claim: “The phrase, ‘everything old is new again’ comes to mind when we talk about the Science of Reading (SOR). **SOR refers to the growing body of scientific research that describes how the human brain learns to read, the skills kids need to develop to become proficient readers, and the appropriate methods to use to teach those skills effectively**” (“The Science of Reading,” n.d.; emphasis Dyslexia Institute of MN).

Response: As literacy faculty committed to our College of Education’s vision to educate for “racial consciousness, social justice, and inclusion within a global context,” we are deeply skeptical of SOR advocates’ promotion of teaching methods developed by scientists, physicians, and educators during the Jim Crow era (e.g., the Orton-Gillingham approach).

- In the given historical moment, with our state still seeking racial reckoning in the wake of George Floyd’s murder, and as historic opportunity gaps continue to plague nearly every facet of life in Minnesota, the notion of everything old becoming new again strikes a dissonant chord.
- In this same historical moment, virtually [all of our professional organizations](#) are calling on us to leverage our work in the interest of racial equity and social justice in education. Most professional literacy organizations recognize that reading goes beyond neuro-scientific processes. It is a sociocultural activity where readers draw on their culture, identity, and personal experiences to make meaning from texts (Barton, 2007; Gutiérrez, 2008; Perry, 2012). Recognition of the integral nature of children’s culturally situated experiences in reading is a significant part of promoting justice in literacy education (Aukerman & Schuldt, 2021).
- Among these organizations, the [Literacy Research Association](#), the [International Literacy Association](#), and the [National Council of Teachers of English](#) are urging us to look with skepticism on SOR claims for the reasons outlined above. Importantly, the International

Literacy Association urges us to consider “the sciences of reading” beyond narrow SOR frameworks in the interest of meeting the needs of diverse multilingual learners.

- We note that many organizations currently leading either privatizing initiatives for public education or attacks on critical teaching in public schools (Kumashiro, 2020, 2021) also happen to be supporters of SOR. In Minnesota, this includes The Center of the American Experiment which promotes SOR (Wigfall, 2022) as it simultaneously leads charges against initiatives such as Minnesota State’s evidence-based Equity 2030 (Kersten, 2022).

## Analysis

Misleading SOR claims like those addressed above reflect what many in the educational-research community recognize as culture-war narratives designed to instill fear in the public about its allegedly failing education system (Berliner & Biddle, 1995; Kumashiro, 2008, 2015, 2020; MacPhee et al., 2021; Sleeter et al., 2018). With divisive storylines pitting whole-language vs. phonics, cueing vs. direct instruction, qualitative vs. quantitative research, and so on (Suskind, 2020), SOR lobbyists propagate the notion that public-school teachers are failing children by neglecting their duty to carry out scientifically “proven” best practices. In turn, they hope state representatives and other officials will invest in “solutions” developed and packaged by corporate-backed nonprofits and private for-profit ventures (Gabriel, 2020).

Educational policy expert Kevin Kumashiro (2008) notes the following about the economic interests served by these culture-war tactics in education:

The fear of a failing education system has helped to advance the standards-and-testing movement, which in turn creates opportunities for profit. Scripted curriculums require textbooks, worksheets, teacher guides, and other materials to be purchased by schools or districts. High-stakes tests require testing sheets, scoring services, tutoring services, study guides, and other materials, also to be purchased by schools or states. Defining only certain methods to be “scientifically proven” privileges certain kinds of research in competition for funding, publishing, and other forms of support (p. 47).

Kumashiro extends analysis to the end result of such fear mongering and opportunism in education: *compliance to authority* rather than the kind of independent thinking needed for sustaining a strong democracy.

As university literacy faculty concerned with the future of public education and its historic role sustaining democracy (Arnstine, 1995; Ayers et al., 2016; Dewey, 1923; Kumashiro, 2020), we reject SOR’s attempt to sensationalize a reading “crisis” for purposes of distributing curricular materials and frameworks investors like Veritas and Blackstone have clearly been looking for returns on (“Cambium Learning Group,” 2018; Lee & Raimonde, 2021). We reject notions that scripted or otherwise teacher-proof SOR curriculums are most “appropriate” for Minnesota’s

reading teachers who must also foster the critical-thinking skills needed for comprehending complex texts and their meaning in relation to the world beyond the classroom walls. Along these same lines, we reject the notion that SOR frameworks may lead Minnesota classrooms back to simpler times prior to the civil-rights movement when all students presumably benefited from their reading teachers' primary focus on phonemic awareness, decoding, and other narrowly prescribed close-reading strategies. We reject notions that SOR is the solution to a legacy of racial and socio-economic injustices in our state and that adoption of SOR curriculum and methodology will close opportunity gaps in Minnesota public schools.

Knowing how strict formalist approaches to reading have historically served to uphold existing relations of white power (Luke, 1995; Maxwell, 2014), we ask, *what will teachers and students be directed away from as they focus more on socially abstracted decoding skills?* While we recognize the desire to provide linguistically diverse students with equitable literacy instruction, we also question at what cost the exclusive use of SOR approaches will come, as the reading process for linguistically diverse students becomes solely about the adoption of standardized phonemic systems. While Minnesota students do indeed need basic skills for deciphering the printed word, they also need teachers who have the freedom to determine what's best for their own students, who can promote authentic inquiry and independent thinking in the reading process, who honor and value a diversity of linguistic identities, and who can above all teach for critical citizenship in a strong democracy.

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