DISTINGUISHED SCHOLAR SERIES

The Science of Readingpolitik: A Commentary

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About the Author

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It seems every state legislature in the nation these days has proposed and passed bills into law on phonics-focused reading instruction, aka the "science of reading" (SOR). Mainstream news outlets appear eager in their support. Indeed, headlines from reputable and questionable sources alike have been hammering a consistent narrative for several years: "Why millions of kids can't read and what better teaching can do about it" (NPR, January 2019). "Why Johnny still can't read" (National Review, October 10, 2020). "School changes reading program after realizing students 'weren't learning to read" (CNN, April 24, 2023). "Kids can't read: The revolt that is taking on the educational establishment" (New York Times, April 15, 2023).

We get the message: America's children can't read, because they aren't learning to read, because they aren't being taught to read. Except, of course, that they are being taught to read with the result nearly every school child can read at some level, usually in and around their grade.

Nonetheless, according to the media, the reading crisis is so grave only government coercion will do (see Chicago Chalkbeat, May 19, 2023; New York Times, May 9, 2023; *Indiana Capital Chronicle*, April 11, 2023). Yet, according to these

same channels, the crisis and its solution are surprisingly simple. "An end to the reading wars? More US schools embrace phonics" (AP News, April 20, 2023). "In the California 'reading wars,' phonics is gaining" (CalMatters, November 7, 2022). "It's time to stop debating how to teach kids to read and follow the evidence" (ScienceNews, April 26, 2020). "The surprising obstacle to overhauling how children are taught to read" (the "obstacle" being experienced teachers and researchers — go figure). (New York Times, May 25, 2023).

Phonics, it is bluntly if improbably asserted, has been missing from the curriculum. Reintroducing it will set everything aright. Except these stories provide no evidence phonics has been missing, shy the occasional strange quote from a single teacher, and no mention is made of the repeated waves of phonics instruction that have lapped ashore at public school classrooms over the past 70 years.

Stories built on a narrative of reading "failure" and scientifically "proven" phonics solutions are strikingly similar. They all include the same key phrases ("science of reading," "structured literacy," "phonics-first," "reading crisis," "settled science," "scientifically proven") and the same exaggerations (e.g., our kids



can't read; balanced literacy tells kids to just guess the words; colleges of education push failed teaching practices). (See the relationship of this genre with teacher-bashing in Thomas, 2022.)

They also all employ the same narrative hooks (e.g., anecdotal but heart-rending stories of struggling children and parental frustration; was-blind-but-now-I-see teacher conversion tales; simplistic accounts of how the alphabet represent sounds; crude depictions of improbably perverse teacher education programs). And they pivot on the same dramatic plotline: Grassroots movement of work-a-day parents surprisingly informed by "scientific evidence" effectively take down state after state's educational establishment. Remarkably as a result, nearly every state legislature has swiftly passed similar high-dollar laws wherein school districts are mandated to select a reading program from an authorized list of approved choices.

But this fable conveniently omits the obvious improbability of there being only two teaching methods one proven effective and the other irredeemably evil—the latter inexplicably advocated by seasoned teachers and academic researchers. It also omits the improbability of the political cohesion, consistency, and lightning bolt success of the putative "parent revolt." The reports eschew any alternative views on the teaching of reading, such as those informed by empirical evidence, historical precedent, or mainstream scholarly opinion on what is known about effective reading instruction. And they ignore plentiful evidence of funding and advocacy from corporate-supported policy lob-

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One hopes somewhere deep down beneath this SOR narrative there may be some actual research, and there are surely legitimate reading researchers who consider themselves scientists of reading. But the journalists consistently and repeatedly get the science very wrong. For instance, the stories typically blur the distinction between the letter-sound skills children need to "decode" letter sequences to word forms (as through phonics, taught in the early elementary grades), and the language development kids need to make sense of the vocabulary the word forms represent (language comprehension, as developed from earliest childhood throughout the school years and beyond). The distinction is an important one, both in research about and instruction for, reading (Paris, 2004). The consistent error of comparing decoding and language comprehension apples-toapples, with one "side" pitted against the other Star Wars-style, suggest education reporters, like Chat GPT, are good at crafting compellingsounding paragraphs without quite knowing what they are writing about.

As another example, these stories often claim the three-cueing system teaches students to "guess

the words." I have yet to come across such a story where the three-cueing system is actually described. Knowledgeable reading teachers know the three-cueing system teaches children not only to use letter-sound relationships to recognize word forms (i.e., phonics, the first cueing system), but also encourages them to use grammatical structure (i.e., syntax, the second cueing system), and vocabulary and sentence meaning (i.e., semantics, the third cueing system) to determine the intentions expressed by the author. Random guessing of wordforms is not part of this framework; but relying on all three systems for word recognition and understating is. For very young readers, phonics alone may not help a child decode a word if they have never heard it nor know its meaning. Teachers use three-code approaches to help young readers "sound out," but also learn new vocabulary and subject content with the contextual support provided by the text. The child's capacity for inferential probability is thereby developed as well.

Using probability-informed inference to make sense of a word is not random guessing; it is how most people learn new vocabulary and new information by reading — for meaning. (For that matter, the first two cueing systems are how your text messaging app predicts what

you are trying to type on your phone; your autocomplete on your email system works the same way). Check any dictionary entry, and the first thing you will find is the correct spelling (letter sequence) of the word, followed in parentheses by its pronunciation (sound sequence), the two together essentially being the first cueing system. After the pronunciation comes its grammatical function, usually abbreviated and in italics (part of speech, the second cueing system), followed by a numbered list of the word's definitions (its meanings, the third cueing system). Since when is the organizational structure of a dictionary radical, ineffective, or harmful?

To be wrong on occasion is merely to be human; from the crooked timber of man, and all that. But to be as consistently wrong as this drumbeat of bad education reporting, a dedicated obedience is required. An attentive reader soon gets the impression these stories are all dutifully cut and sewn out of a corporate-sponsored template. And indeed, there are several "nonprofit" portals for this kind of disinformation online, and at least one entity for training budding reporters in how to write it (e.g., Education Writers Association).

Yes, research is clear...

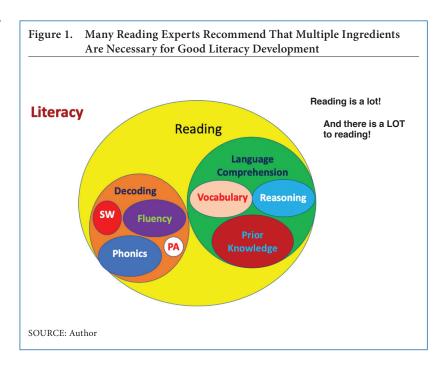
As a scholar of reading education, I can agree with one claim in this narrative: The reading research is robust and clear. Teaching reading in early elementary grades with some form of phonics is more effective than trying to do so without it (National Reading Panel, 2000a, 2000b). Few reading researchers or teachers would disagree. But which method of teaching phonics

is best? The synthetic approach, or the analytic, or the analogical — or the systematic, the word-based, the interactive, the multisensory, the structured, or some other? To date, calculated across methods or studies (e.g., Bowers, 2020), the research does not indicate it makes much difference which approach you use, so long as you teach phonics deliberately and well. Sales pitches aside, there certainly is no compelling evidence for any commercial brand over another.

But neither are these methods mutually exclusive, and a good teacher hoists a heavy toolkit. Nothing works for everyone, and nothing works for anyone all the time. The challenges a child may encounter while learning to read are myriad and change over time. Depending on the child, some methods may in fact be superior to others for that student's skill level, strengths, and difficulties. So common sense recommends that experienced teachers

be allowed to employ a range of methods and strategies according to what will best match their students' needs. Yet many proposed SOR laws would effectively forbid such adaptive teaching (e.g., O'Donnell, 2023).

Although different phonics approaches may contribute equally well, on average, to teaching decoding skills (recognizing letter sequences as word forms), there is more to decoding than phonics (practice with real texts for fluency is imperative, for instance), and more to reading than decoding (language comprehension, for an obvious start). Pushing a single lower-order factor, such as phonics (and a singular method for teaching phonics, at that) to the exclusion of necessary higher-order factors, such as comprehension, may actually undermine the longer-range objective of teaching letter-sounding skills — that being to teach children to make sense of and thus learn from the texts they read.





That is why many reading experts recommend comprehensive reading curricula akin to a well-balanced diet, inclusive of the many ingredients necessary for good literacy development (National Reading Panel, 2000a). Phonics, yes, and phonemic awareness, alphabet knowledge, sight word reading, and plenty of practice for decoding fluency. But also writing instruction, vocabulary growth, effective oral presentation, careful reasoning, knowledge development, engaged group discussion, and especially motivation and engagement to inspire the effortful practice necessary for students to become effective readers and writers (see Figure 1). Reading requires a lot (Compton-Lilly et al., 2020).

Alert the Press and the People!

Journalists and politicians who emphasize the necessity of phonics for mastering alphabetics, but posit language development instruction as a negative counterpoint, are paddling out of their depth (Moscatello, 2023). One of the first things teachers learn in their instructional trainings is the "simple view of reading," wherein reading (R) reading as measured on a reading comprehension test—is understood as the product of decoding skills (D) and language comprehension (C), both of which can be measured separately. There is even a formula to demonstrate the relationship mathematically: $R = D \times C$ (Gough & Tunmer, 1986).

Granted, this is a *simple* view of reading, a thumbnail heuristic for conceptualizing the relationship of general factors. There's a lot packed into D and a lot packed into C and a lot more besides. But the multiplication symbol in the formula is key. It indicates both D and C are necessary to do well on R. Neither is sufficient alone. A weakness in either will bring down the entire test score. Moreover, a weakness in R (a low reading test score) does not warrant the assumption that the problem must be D, let alone just one of its elements—phonics rather than C, or some combination of D, C, or "other." To determine the reason for a weak reading score, further observation and assessment is required. From factor analyses, we know students who struggle to learn to read do so for a variety of reasons. Thus, teaching methods that compulsively focus on one factor to the exclusion of others may be helpful for students weak in that factor — but useless, even harmful, for students with other needs.

As noted, this is a simplistic view of reading and there are clearly other factors beyond decoding skills and language comprehension for good reading (Duke & Cartwright, 2021). For instance, interest, agency, and engagement of students are crucial in the long term (and becoming a good and thoughtful reader is a long-term endeavor). Research shows phonics is most effective in the earliest grades (Kindergarten, Grade 1). But research also shows that by second grade, most kids who struggle with decoding do so because of difficulties with fluency, likely due to lack of adequate reading practice, rather than with phonological accuracy due to inadequate phonics (Riddel Buly & Valencia, 2002). Lack of phonemic accuracy doesn't even come second

for such students as a cause of their reading difficulties; language comprehension does. Reading is far more complex than the simple view would suggest. But for newbies to the world of reading instruction (e.g., parents, legislators, journalists) it is a crucial first pass. We should not be afraid to use the simple view to enlighten the public. (As I tell my own education majors: Teach students where they are, not where you wish they were.)

Follow the Money!

Why then all the dubious media focused on phonics? And why are there so many similar state laws being introduced across the U.S. mandating one-size-fits-all systematic phonics programs often delivered by digital technology?

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Journalists should know this one: Follow the money! Consider the price tags proposed in these bills: \$100 million in Tennessee; \$110 million in Minnesota; \$111 million in Indiana; \$162 million in Ohio; \$90 million for Atlanta's Fulton County

alone; trillions of dollars proposed nationwide, with a third or more going to school districts to cover the purchasing of new products. What kind of products? Reading programs that presequence synthetic phonics instruction (reading by sounding out words letter-by-letter), often technology-delivered for use through digital devices. Although sequenced-synthetic approaches have not been shown to be more effective at teaching kids to read than other approaches, they have been shown, with the assist of policy mandates and taxpayer funding, to scale up for publishers in reliably lucrative ways. The use of digital delivery will likely amplify companies' profits, but there is no evidence it will improve students' reading (e.g., learning to read at home via internet as during the pandemic).

Assertions that there is only one right scientific way to teach reading most likely hale from the educational publishing and testing conglomerates that stand to make a bundle — if they can successfully hustle state legislatures into passing laws mandating their instructional products. (Apparently, many school districts wouldn't buy into them otherwise, which tells you something.) And at their hustle they have proven quite adept. To provide a rationale—or at least ground cover distraction—for these coercive measures, dubious claims of reading wars, phonics crises, the putative evils of teacher unions, and anecdotes about evidence-based programs based on "settled science," are megaphoned through social and traditional media by nonprofits indirectly but surely funded by corporate sponsors (a set up not

unprecedented more broadly; see the Sacklers' relationship with the National Academies of Science, Technology, and Medicine, New York Times, 4/23/23).

Yes, America has had phonics fads in the past. Worth recalling, after each fruitless mania there was a sobering morning-after wherein some backfield hijinks, usually involving money, were revealed.

If this sounds like a stretch, keep in mind the same scenario played out in the 1990s, back when Nicholas Lehmann at The Atlantic, coined the term "Reading Wars." Yes, America has had phonics fads in the past. Worth recalling, after each fruitless mania there was a sobering morning-after wherein some backfield hijinks, usually involving money, were revealed.

Louisa Moates, lead author of today's much ballyhooed LETRS program, cited and often quoted with untempered enthusiasm in SOR news features, was even then a vocal proponent of phonics-focused "scientifically based reading," which was pitted against something called whole language. The false claim was made that whole language taught children to "guess" at words rather than sound them out letter by letter. A nationwide reading crisis had putatively resulted, and systematic phonics through direct and explicit

instruction was claimed as the only cure — although empirical evidence for a crisis was hard to discern, and in any case, few teachers were using whole language.

The result of that earlier push for "scientifically based reading" was the National Reading Panel report on early reading (2000a, 2000b; still cited by systematic phonics proponents as proof for the superiority of their approach, although the report did not find for that). And on the report's supposed basis came the Bush Department of Education's (DOE) \$5 billion-plus Reading First program, 2001-2006, mandating phonics skill drilling and testing 1½ hours a day, 5 days a week, Kindergarten through Grade 3. It handsomely benefited three major publishing conglomerates and a host of camp followers. Unfortunately, according to a congressionally mandated evaluation in 2008, kids who went through the required programs didn't do any better on end-of-year reading tests than similar kids who hadn't gone through them (Gamse et al., 2008). The empirical evidence of the efficacy of systematic phonics over comprehensive instruction proved as elusive as the evidence of a reading crisis.

Nonetheless, this same gameplan was rerun again in the 20-teens at the urban district level. Baltimore, Boston, Chicago, Houston, Louisville, Tampa — all adopted rigorously systematic, synthetic phonics programs and teacher training systems. The results were disastrous (see 2015-2019 urban district data at https://www.nationsreportcard.gov/ reading/districts/scores/?grade=4). And now here we go again.



Diane Ravitch, a former Bush DOE official, has recently retraced the history of 1990s phonics fiasco (n.d.). But eyewitness accounts and critiques at the time by Richard Allington (2002), James Cunningham (2001), Gerald Coles (2003), or Frank Smith (2003) still seem strikingly fresh — because 20-plus years on, the "new" science of reading repeats the storyline and nomenclature of the 1990s to a T. Today "science of reading" has displaced "scientifically based reading," but it still promotes systematic phonics and structured literacy (e.g., Orton-Gillingham-styled "multisensory" reading instruction). Meanwhile, "balanced literacy" has displaced "whole language" as the nemesis, with some SOR proponents insinuating balanced literacy is whole language in disguise. Again, the false claim is made that kids are taught to "guess the words."

The call to replace "failed" instructional practices with phonics skill drilling is even older than the 1990s, though. Rudolph Flesch' 1955 Why Johnny Can't Read, fingered progressive education's "thoughtful reading" as the cause of public education's reputedly mediocre schools (read popularly democratic and locally controlled). Flesch's red-baiting, and the subsequent launch of the Soviet Union's Sputnik, helped usher programmatic phonics drilling, materials, and tests into the schools nationwide (late 1950s-1970s) to meet the intellectual challenges of the Cold War — to declining test scores over those years but startling profits for publishers.

For that matter, the same concerns were voiced in the first quarter of

the 20th-century, too, right down to the confirmation biases of phonics obsessives (Grupe, 1916). So, it is not as if the scientific rationales for phonics drilling are new or unfamiliar, let alone "settled" in favor

to do to guarantee fidelity to the program and maximal product use, including incessant testing, screening, progress monitoring, off-site instruction and homework (cha-ching!). And then, still, there

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of synthetic phonics-first-and-only. We have lots of research and over a century's worth of precedent: Efforts to drill teachers in prepaced synthetic phonics have never made a significant difference in children's reading ability, and that is the reason for the "surprising obstacle" of teacher resistance to the new phonics mandates. Seasoned reading professionals know better than the profiteers.

So, What's New This Time?

There are three notable differences between yesteryear's push for systematic phonics and today's, however. First, the mandated instructional products are increasingly streamed off the internet for use on tablets, laptops, Chromebooks, or smart phones. As a result, many schools no longer own the products they pay for. Instead, they rent time-limited access to them, always having to return for more product (cha-ching!). Second, the products and technology are taking over the teaching — as they are designed

are massive text set collections available, replete with workbooks, teacher guides, manipulatables, and all the rest.

Thirdly, the publishing and testing corporations are now chiefly owned by tech-oriented New York hedge funds or private equity groups in California (e.g., Veritas Capital, Platinum Equity, Clearlake, A-Street, Alpine, Francisco Partners, Illuminate, etc.) For the most part, these are not publicly traded companies you or I can buy into through our 401k. These are tightly controlled financial cartels; to join you need to pony up millions. Strictly reserved, in other words, for the super-rich and their financial institutions. After all, the margins and receipts for online delivery of these kinds of product are amazing! But if you think Wall Street financiers and Silicon Valley venture capitalists stay awake at night worrying about how young children in America learn their phonics ... you're an interesting person!



But Seriously, Folks...

Are there classrooms where phonics is not being taught, or not taught well? Unfortunately, yes, there are classrooms where inadequate instruction may be found. But those classrooms are more likely led by emergency hires, parent volunteers, permanent substitutes, provisional certifications, para-pros pressed into full service, or newly minted alternative-route-to-licensure teachers. Caring, hard-working adults, in other words, but with little training in how to teach children to read. But they are nonetheless trying their best, because our schools are facing unprecedented rates of teacher attrition, a true crisis that is going unattended. A real challenge in teaching our kids to read, then, is a lack of properly trained, certified, and supported teachers, not the brand or method of phonics instruction being used.

Are there actually students who have atypical difficulty learning decoding skills for word form recognition? Yes, again. But, at the risk of sounding glib, that is not at all surprising. People differ on anything you might measure them on, including reading development trajectories. Some children are going to have more difficulty learning to read than others. The good news is there are approaches for assessing and redirecting such students that are more likely to be effective than not. The bad news is these methods are currently being back benched by the new SOR laws in favor of rather incoherent instructional programs that offer little probability of effect.

Some may think automated digital teaching packages can provide a solution to teacher attrition.

There is a long history of efforts to automate reading instruction from the 19th Century forward—each, it seems, proven to be more scientific than the last—but they have never worked to improve student outcomes and have, on occasion, led to the opposite. Research on current digital approaches report similarly lackluster results: The pandemic was a perfect experiment in nature. Yet the newly coerced use of ill-suited reading instruction packages and the marginalization of teachers by technology together have failed to rebound student achievement now

cally, no approach has ever scaled up via policy to produce superior reading test scores on standardized measures: third, because standardized measures are largely g-weighted (Spearman's correlate for general intelligence) to ensure test reliability and it turns out intelligence is a correlate of language development, not decoding; and fourth, because in the great equation of what makes for good reading development, choice of phonics method is a single digit variable. So, even if one reading method were shown to be somewhat better than another, that would only

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that students are back at school. Instead, what we are getting is increasingly depressed scores plus increasingly depressed students (Chaterjee, January 7, 2022)! These innovations may even contribute to increased rates of teacher attrition.

The Bottom Line

The chief point, here, is not that phonics is harmful or useless, although, in excess, phonics can get taught to the exclusion of other things that matter equally for good reading. It's that arguing about how to teach phonics is pointless: First, because, as noted, evidence-based research does not substantiate the use of any one approach over another; second, because, historiamount to some tenths of a percentage point contribution to the overall calculation of student achievement. In the real world, .3%, or whatever, is not measurable as significant. Other factors are far more pressing and promise a greater bang for instructional time and taxpayers' dollars.

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have an effect from existing phonics instruction, and you replace that with newer but similarly effective phonics programs, there is no reason to expect a better result even when delivered via digital devices. There are, however, new costs for "new" materials, and thus new profits. There is also now the allure of predictive reliability and digital control. And with the prospect of further advances in artificial intelligence (AI), it could be there are bigger objectives than phonicsmania behind the science of reading narrative.

Big Finance and Reading Curricula

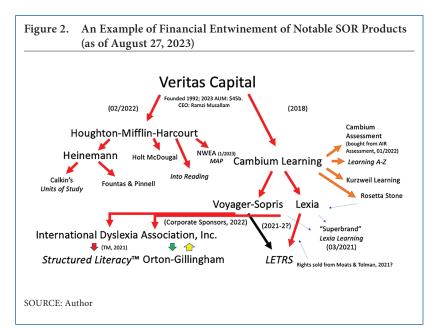
The overheated public relations advocacy for phonics programs may likely be a strategic distraction. The long game here may instead be technological control and privatization of the schools — and with it, a de facto national curriculum determined by coastal Big Tech-Finance. Phonics fads, as history shows, come and go. Pushing favored products through procurement policies is not new, even in education. Neither are hapless legislators, who wouldn't know a phoneme from a flip-phone, rushing to fork over barrels of taxpayer dollars with little coherent rationale. That's business as usual.

What is new is the opportunity to corner the market on technologydelivered instruction within the public schools. Getting there "firstest with the mostest" would allow Big Tech-Finance an early land grab. The phonics-first craze may be just a convenient subterfuge for this

longer game of privatizing the public schools. Still, conveniently for the financiers, the product-centered and product intensive approaches to skill drilling (such as systematic phonics) are more profitable than studentcentered or teacher quality-focused approaches powered by meaningful activities and real-time response to students' emerging abilities (such as with most forms of balanced literacy). So, of course, it is the skilldrilling that gets pushed, but to the exclusion of the other things that matter, such as meaningful reading experience. And unfortunately for SOR, the meaningful activities and live instruction being sidelined are better suited to the language comprehension improvement and knowledge development that is necessary for students to do well on their end-of-year standardized tests. And this turns out to be especially true for students "at risk" of reading and learning difficulty — those tending to be students from poverty, from newly immigrated families,

or from intergenerationally lower literate households.

Thus, using technology to emphasize what the technology is good at—lower-level skill drilling—is not likely the solution to putatively weak reading scores. In any case, most students are well past mastering their phonics by end of third grade (Foorman et al., 2015; 2018), so forcing even more phonics upon them after that point will achieve little, because it isn't what they need; while what many striving students do need-language, knowledge, and reasoning development—goes without instruction on the pretext that those elements will develop "naturally." So, no gain is likely to be had there. A lose-lose scenario if ever there was one, which leads us to why such wrong headedness would get buffaloed through so many state legislatures with blitzkrieg speed. Blithering incompetence, or the persistent pressure of campaign funding?



Publishers Covering Their Bases

Should digitized systematic phonics instruction bellyflop at improving students' reading ability, as it seems to be doing, the same companies may eventually pivot to selling the comprehension-oriented reading products they also happen to own (as they have done in the past). As shown in Figure 2, for instance, Veritas Capital, owner of Cambium, which owns Lexia, which owns the rights to and publishes LETRS and is a major sponsor of the International Dyslexia Association, Inc., recently bought and took private Houghton Mifflin Harcourt (HMH). HMH publishes Into Reading, one of the nation's most notable legislatively mandated phonics-focused reading programs. In January of 2023, HMH also bought Northwest Education Association, maker of the MAP tests, the most popular elementary-level progress monitor for reading and math in the nation.

But HMH also owns the imprint Heinemann, publisher of Fountas & Pinnell's comprehensive literacy continuum and Lucy Calkin's highly popular Units of Study, both of which take a student- and meaning-centered approach to reading development (for which phonics advocates have given them much grief). These widely appreciated programs include and extend good phonics instruction, but they promote reading for meaning and require the direct, personal instruction of capable and well-supported teachers.

The SOR-preferred phonics products are product-use intensive and

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therefore more lucrative. And, of course, whatever the program, there are always the related screeners, progress monitors, and summative assessments, in addition to the text sets, guidebooks, virtual worksheets, etc. proctored through the same digital platforms. More profitable than what is leased, however, is what can be taken for free and repackaged for sale: data on student's use of the product (ostensibly for product improvement purposes) vacuumed up key stroke by key stroke, pause by pause, eye glance by eye glance, and soon enough pupil dilation, facial expression recognition, guttural or vocal gestures, and all the rest-not merely psychometric data, but biometric, behavioral, emotive, and psychiatric data—all free for the taking. A massive invasion of students' and families' privacy with nary a permission slip in sight. For what? For Big Data crunching and the building of reliably predictive algorithms for anticipating and controlling users' choices. Smell the money yet?

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chests in "one-party" states poses a severe danger to public education. Given human nature, hedge and private equity funds empowered with big tech (fin-tech, as they call it at the Wall Street Journal) acquiring entire sectors of an industry guarantee the kind of coercive pricing and disregard for consumers and workers most fair-minded and decent people resent. (See Ballou, 2023, on how similar scenarios have hit medical and elderly care fields.) We the people could and should demand better for our children and communities. And we could — were we knowledgeable educators to alert the larger public in winning ways.

The Longer Game of SOR

Historically, school privatization has involved support for small networks of charter schools, semi-private public schools that on occasion went belly-up (leaving the founding investors with golden parachutes at public expense). What is going on today is far more brazen — grabbing a beachhead in school classroom; commandeering a monopoly on instruction (teaching of students, training of teachers); monopsony through legislated mandates for state-approved programs and materials; plus the Big Data treasure chest dependably minted by instructional technology. The result is a potential profit generator of magnificent proportions — public school privatization on techno-steroids. The new SOR legislation provides the hedge funds and private equity groups all the tax-sourced profits, leaving the states and districts with all the legal liabilities and expenses—essentially the "heads-we-wintails-you-lose" approach for which



private equity and big finance have become notorious—as many former employees, customers, and forcedbuyout shareholders can attest.

In the wake of this wholesale appropriation of the public schools, local control of instruction and even state control of the curriculum would become things of the past, as could quasi-independent program evaluations, third-party scientific research, and teacher preparation by colleges of education. The takeover of the school systems could even displace independent certification of teachers by state departments of education. After all, only those companies collecting (and guarding) the test data could make informed determinations about who is effective with their products ... or what new products of theirs will be needed next year. Already venerated professional development centers for high-quality reading teachers have been shut down and replaced with training centers for the new SOR products (Goldstein, 2023).

But one thing is for sure. The massive media push for phonics mandates across the nation in the past 4 years is the sort of coordinated shock-and-awe, full-court press that only well-funded lobbyists, political action committees, and advocacy "nonprofits" could muster. This is clearly not a revolt by a handful of community-based concerned parent groups. On the matter of why so many legislators in so many states would support these expensive bills, I'll refrain from speculation. But the quick rush to mandate these products has all the markings of a classic boondoggle.

If all this wasn't unsettling enough, we now have mounting evidence of screen time addictions correlating with increased rates of childhood and adolescent depression and mental illness, including increased rates of attempted suicide (Bitsko et al., 2022). Newer forms of educational technology built around evolving entwinement of information systems and the newer forms of AI are going to radically transform public school classrooms. Disregard for the wellbeing of end users while chasing profits with the assist of dubious or fabricated research findings is how Big Pharma gave us the opioid crisis, how Big Tobacco gave us the lung cancer crisis, how Big Oil gave us the leaded pollution and global climate change crises. What will Big Tech-Finance with their doubtful evidence give us in classrooms? The end users here are children. Their presence in schools is mandatory. Transparency and sound judgment are requisite. Inadvertent collateral damage upon a generation of Americans is not acceptable.

Is Mammon a Sufficient **Explanation?**

So, okay, there's a lot of money on the table, and big equity groups laser-focused on technology profiteering are at the fore, and the stakes may be unbelievably high, and no one is guarding the nursery. Yet there is the possibility of an ideological agenda behind SOR as well, one not in the best long-term interest of the American people, at least those who rely on the public schools. Phonics-first pedagogy is a pedagogy of obedience to lower-level

skills and the authority of the text, recitation of sounds represented by letters, regardless of whether the sounds make sense or not. Reading for obedient chanting seems to be the goal of these systematic approaches. Perhaps legislators, financiers, and journalists of an authoritarian bent believe teaching via obedience training leads to more obedient and complacent citizens. History demonstrates otherwise, but clearly within a cultural moment where "social" media is being wielded by hate-mongering demagogues and the coastal chattering class toys with the idea that aristocracy is a solution to meritocracy's discontents (e.g., Deenan, 2023; cf., Sandel, 2020), worry should be in order for middle-of-the-road devotees of American democracy.

Bluntly put, displacing the goal of meaning with sound-making in systematic phonics instruction may be neither an oversight nor a pedagogical misstep. It is possibly a feature. The agenda is to thwart the education of those most likely to be in need of better language and literacy comprehension development — to keep the poor intergenerationally poor, and the marginalized intergenerationally marginalized; to assuage the financial anxieties of the professional class and perpetuate cheap labor for the favored, while undermining a necessary pillar of democracy: a literate and informed electorate that includes even those least well served by the status quo. Is this just another case of confirmation bias fueled by self-dealing, or something even less savory?

What Our Schools Really Need

What the schools most need, and the newly mandated phonics laws most lack, is the capacity for instructional nuance in response to children's unique developmental trajectories and varied literacy interests and challenges. At present, digital platforms do not facilitate effective teacher mediation of the instruction to suit individual students (they might be redesigned to that end, but at present this is not even a promise). We still need responsible, effective teachers to provide the optimal conditions for fostering language, careful reasoning, and knowledge, as well as socioemotional self-regulation.

We need to trust and invest in our teachers, our schools, and our children, and parents-per a recent NPR poll—overwhelmingly agree. Well-prepared teachers are the mostpowerful way to improve students' reading ability. We should support them with high-quality professional development so they can responsibly and effectively provide students the full range of skills, reasoning, and knowledge needed to read and learn and live well. We should temper teachers' hard-won understanding of effective instruction with the knowledge of what research shows is most probable, and distance them from the marketing of product barkers pushing the next bright, shiny object. Their instruction should always be student-centered, not product-centered. Our children, their futures, our families, and communities, perhaps even our democracy, are at stake.

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