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Maximizing Literacy Instructional Potency in a Classical Education Charter School

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Capstone Project: An Action Research Project

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Abstract

Variable research spans several decades on how emergent readers should be taught. Literacy experts and governmental reports document evidence-based reading acquisition. Yet, a wide gap remains between the state of research and a professional understanding and application of how teachers should maximize daily literacy instruction in elementary classrooms. Teaching students how to crack the alphabetic code is crucial and forms the foundation for further reading acquisition as students mature. Robust scientific consensus overwhelmingly supports utilizing explicit, systematic phonics instruction in the initial stages of learning to read. Therefore, educators must prioritize strong foundational phonics skills in grades K-2 to help their learners become confident, successful readers. A comprehensive review of critical influences on reading in the early grades will enhance instructional adjustments for improving literacy instruction. Consequently, this action research study provides school leaders and teachers with the scientific, theoretical, and historical background to elevate K-2 instructional methods and promote evidenced-based literacy instruction. To improve student achievement and pedagogy, school leaders must empower teachers with professional learning opportunities to understand and apply the science of reading research so they may begin crafting relevant curricula that employ explicit, systematic phonics instruction in K-2 classrooms.

Keywords: the science of reading; K-2 evidence-based literacy instruction; explicit, systematic phonics instruction; literacy professional learning needs

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Maximizing Literacy Instructional Potency in a Classical Education Charter School

Introduction

Learning to read transforms lives because reading is the basis for acquiring knowledge, cultural engagement, citizenship, and career success. Therefore, one might argue that the most crucial task of any elementary classroom teacher is teaching students how to read with expertise and fluency. However, effective literacy instructional practices are complex and have been embedded in controversy. Reading wars have ensued for over 200 years regarding teaching methods for young readers (Castles et al., 2018). Educators have witnessed the reading pendulum swing from a phonics first approach, in which letter sounds are explicitly taught, to a whole language approach that fosters literacy-rich environments to prepare students to read (2018). Those were followed by an attempt to balance both paradigms, commonly referred to as balanced literacy.

Research in psychological science has played a significant role in identifying the most powerful instructional strategies to skillfully teach students how to read (Castles et al., 2018). Specifically, cognitive scientists have been studying the neuroscience surrounding the science of reading and pinpointing the reasons some learners struggle to read with ease. Finally, educational professionals have been provided with crucial insight toward helping to crack the reading code.

Undoubtedly, the most recent research promotes phonics as central to learning to read within a written alphabetic language like English. However, controversies arise among professionals when educational researchers 1) do not reflect on reading instructional basics beyond the emergent stage or 2) apply science to classroom instructional practices (Bowers, 2020; Buckingham, 2020; Castles et al., 2018; MacPhee et al., 2021). Therefore, a comprehensive study of the scientific background and applied science is necessary to promote the best reading instructional practices in classrooms.

Seven Hills Preparatory Academy (SHPA; Seven Hills), a sixteen-year-old classical education charter school in the Minneapolis, St. Paul metropolitan area, has consistently been recognized as an

academically strong charter school since its inception. Many facets of the school's culture and organization set it apart from its counterparts, including its standardized literacy achievement scores, as seen in Table 1 (Minnesota Report Card: Seven Hills Preparatory Academy, n.d.). However, multiple factors require Seven Hills' administrative team and literacy specialists to pause and reflect on the status of Seven Hills' literacy instructional practices and methodology.

Table 1

Seven Hills Preparatory Academy (SHPA) School-Wide Reading & Math Achievement Scores

	2018	2019	2021	3-year average
Reading	60%	59%	53%	57%
Math	67%	64%	48%	60%

Note. (Minnesota Report Card: Seven Hills Preparatory Academy, n.d.). Standardized achievement tests were not administered nationwide in 2020 due to the worldwide COVID-19 pandemic.

SHPA elementary classroom teachers are afforded much autonomy in how they approach and organize literacy instruction in their classrooms. However, this protocol places an enormous responsibility on classroom teachers, especially newly hired teachers. Additionally, this practice creates academic inequities within the school system because literacy instruction methods are not standardized or streamlined. Thus, students' literacy rigor depends on their assigned classroom teacher.

The Seven Hills administrative and literacy specialist teams posit that K-5 classroom teachers seek more structure and guidance regarding literacy instructional protocols due to feedback gathered during one-to-one coaching conversations, grade level discussions, and PLC work. Additionally, the Seven Hills staff is concerned that literacy standardized achievement test scores in grades 3-5 have fluctuated since 2018 (Minnesota Report Card: Seven Hills Preparatory Academy, n.d.). Moreover, SPED referrals for students struggling with specific learning diagnoses involving literacy skyrocketed at the second-grade level from 2019-2022. Finally, given the current research surrounding the science of reading, key stakeholders believe Seven Hills Preparatory Academy needs to shift philosophical practices

from a balanced literacy approach to a structured, systematic one, especially in grades K-2. Thus, SHPA's instructional literacy practices need to be evaluated to determine if any instructional adjustments should be considered to provide SHPA K-5 scholars with a supportive reading environment that nurtures strong, independent readers.

First, a literature review focused on a meta-analysis of academic research will compare how literacy practices at Seven Hills measure against evidence-based practices published in scholarly journals since 2018. Second, SHPA teachers will complete a survey reflecting on their professional experiences teaching literacy to K-5 students. The survey results will quantify K-5 Seven Hill teachers' professional opinions regarding their literacy instructional practices to determine if school-wide or grade-level instructional changes are desired and should be adjusted to maintain robust literacy instruction. Third, the study will evaluate SHPA teachers' opinions to reveal if a philosophical shift is recommended to properly align literacy instructional practices within the Seven Hills academic community.

Overall, the study's main research questions probed:

- Is there evidence for improvement in SHPA literacy classroom practices?
- What research-based changes might improve or elevate literacy instructional practices at SHPA?

Resources for this action research study were scrubbed on Google Scholar and obtained from the DeWitt Library at Northwestern College in Orange City, Iowa. Only academic studies published in peer-reviewed journals from 2016-2022 were considered for research to support the action research study. Literature review key topics highlighted elements of Seven Hills' current literacy instructional repertoire, which included the science of reading, guided reading, phonics, phonological awareness, phonemic awareness, reading comprehension, racially informed/aware literacy instructional methods, whole-group read-alouds, and how to maximize students' academic content knowledge. Ultimately, twenty-four peer-reviewed articles were procured to understand researchers' current knowledge

regarding literacy best practices and to identify gaps in research-backed literacy instructional recommendations that supported the action research study.

For the past several years, SHPA administrators have wrestled with providing teachers an appropriate balance between structure and autonomy to maintain teacher satisfaction yet ensure substantial student achievement. Current evidence-based educational research recommends several literacy instructional adjustments that can be justified. These guidelines will ensure Seven Hills Preparatory Academy achieves a solid literacy instructional model that maximizes student achievement of Minnesota's state ELA standards, elevates teacher efficacy, and potentially reduces the number of SPED referrals initiated by classroom teachers.

Literature Review

A Scientific, Theoretical, & Historical Reflection of Literacy Instructional Research in the 21st Century

The literature review findings were organized into three main sections. First, readers are presented with a comprehensive review of the science of learning to read, which outlines foundational phonics and language acquisition. Then, readers will examine theoretical and historical movements that shape current literacy instructional models and methods. Finally, readers will explore the science of reading recommendations as they are translated into classroom instructional practices.

Investigating and providing literacy research quality is extremely important and valuable to all levels of educational professionals, from the classroom to the school board and legislative committee rooms. Educators need researchers to help them do their jobs more effectively. Frequently, educators realize the outcomes of their teaching but do not have the time to evaluate the possibilities of approaching reading instruction differently. Thus, researchers are integral in helping classroom teachers maintain robust literacy instruction. Furthermore, school leaders must maximize awareness and use reading research to make informed policy and instructional decisions. Educational research and experimentation are essential to maximizing public education within our communities.

Educators and researchers must utilize qualitative and quantitative methods to build knowledge and science regarding reading instruction. Quantitative studies build the science of reading knowledge, whereas qualitative research tells the stories supporting the statistics. Both types of research contribute to what we know about reading comprehension and development (Milne, 2020). However, educators must be wary of overgeneralizing the science of reading without verifying that adequate research was applied to instructional classroom practices or experiential learning (MacPhee et al., 2021). All involved in education have a moral imperative to grapple with old and new research, especially if they contradict previously held ideas (Gabriel, 2020).

A Scientific Reflection on Cracking the Reading Code. *Meta-Analysis.* Meta-analysis research combines data from extensive studies into one big analysis review. Comparison groups are required to compare results, yet the quality of groups must also be carefully and intentionally evaluated. Research must account for student demographics, teacher quality, collective teaching experience, and other school differences (Shanahan, 2020a). Additionally, research and instructional terminology must be defined so substantial differences and understanding does not impede policy changes for literacy development and opportunities (Gabriel, 2000).

Experimental Research. Straightforward research plays a crucial role in reading science, but it should never be the final determinant of practice or policy; that must depend on experimental or experiential studies that directly evaluate the effectiveness of methods or policies (Shanahan, 2020a). Experimental research is necessary to discriminate between instructional practices that are beneficial, fun, or simply look good compared to those that will close achievement gaps. Experimental studies must be at the core of the science of reading research so teachers can rely on evidence-based instructional claims.

Robust experimental methods must be implemented to ensure consistent, reliable, valid, and replicated results. Untested hypotheses encourage poor pedagogy. “No matter how good the ideas of

basic research, they must be tried out instructionally and show to be beneficial in improving reading ability or its dispersion in some way before they should be recommended to educators and policymakers” (Shanahan, 2020a, p. S241) The widespread adoption of specific instructional practices or formulation of public policy without direct, repeated, rigorous evaluations without verifying that new educational insights will improve instructional practice is dangerous. Even when proven empirically accurate, basic research can mislead instructional practices if their effectiveness is not evaluated or applied to classroom instruction (Shanahan, 2020b).

Shanahan (2020b) offers educators several thoughtful considerations for monitoring the fidelity of applied classroom literacy research. Educational professionals should reflect on these questions to weigh the pros and cons of instructional methods before implementing new practices within classrooms.

1. Is professional development instruction provided by a certified, trained educator with classroom teaching experience?
2. How often and how long were student support interventions offered? The appropriate amount of time is crucial. Educators must be cautious about providing too little or too much support.
3. How substantial were the differences between action and control groups?
4. Has the study been replicated?

Instructional experiments reveal how to optimize teaching methods in classroom environments. Thus, they must be applied and proven to improve learning among teachers and groups of students in various conditions and populations (Shanahan, 2020a). Indeed, educational research is much different than medical research. It cannot be as precise, so multiple studies and meta-analyses are necessary (2020b).

Systematic Phonics Instruction. Systematic Phonics (SP) describes practices for teaching decoding, word analysis, and word reading in a planned sequence. It teaches the correspondences

between graphemes (letters and clusters) in written words and phonemes (speech sounds) in spoken words and how to use grapheme-phoneme representations to read and spell, too (Bowers, 2020). An evidence-based understanding of systematic phonics prioritizes a comprehensive literacy program that elevates four essential literacy elements—phonemic awareness, fluency, vocabulary, and reading comprehension – not just phonics instruction (Buckingham, 2020). Castles et al. (2018) advised that SP is crucial because it provides students with skills to understand words via phonological pathways. Once students can accurately say or hear a word, either aloud or mentally, they can retrieve its meaning if it is part of their vocabulary.

Poignant research outlined evaluation standards to measure the effectiveness of applied research. Bowers (2020) argued that Ehri et al. (2001) and the National Reading Panel misled educators and other researchers into believing systematic phonics instruction promotes long-term literary growth. Bowers' research suggested that systematic phonics only provides short-term literacy achievement between 4-12 months. Plus, no proven advantage persisted when introducing phonics skills early among grade-level readers, and there was no short or long-term benefit to struggling readers beyond first grade (2020). Therefore, scientific consensus promoted that systematic phonics instruction was most effective during the early stages of learning to read (Castles et al., 2018).

Supporting Reading Comprehension with Systematic Phonics (SP). Advocates of SP understand educators must teach explicit and systematic phonics instruction alongside meaning-based instruction, including morphology, vocabulary, and comprehension past first grade (Buckingham, 2020). Readers' morphology understanding and skills affect their ongoing and long-term reading comprehension. Knowing how root words, prefixes, and suffixes alter contextual word meanings may hinder or promote students' reading comprehension (Heller, 2022).

When interpreting or using research evidence to promote systematic phonics instruction, it is essential to remember that phonics is only one part of learning how to read. In the earliest stages of

learning to read, word reading is the strongest predictor of reading comprehension, but once decoding is fluent, language comprehension becomes more prominent (Buckingham, 2020).

Synthetic Phonics. Synthetic phonics begins with phonemes, the smallest sub-word level, and are reversible in reading and spelling processes. Readers learn how to synthesize phonemes and graphemes to read and spell words. Then, contextual knowledge is gradually learned (Bowers, 2020; Buckingham, 2020).

Analytic Phonics. Analytic phonics concentrates on larger sub-word units such as onset-rime or word families (e.g., rat, cat, sat, mat). Many literacy professionals consider synthetic and analytic phonics instruction systematic but learning phonics at the phoneme level is more systematic and widely applicable to building vital reading skills among young learners (Bowers, 2020; Buckingham, 2020).

Flaws and Confusion with Phonics Research. Numerous studies boost superior outcomes when children are systematically and explicitly taught letter-sound correspondences and how to blend and segment them to spell and read words. Synthetic phonics is strongly aligned with cognitive science research and reading models that are highly predictive (Buckingham, 2020). However, Bowers' (2020) definition of systematic phonics suggests educators must teach the entire grapho-phonemic code before considering morphology or word meaning. A thorough review of research literature demonstrates their claims are unsupported and do not promote their overall assertions nor align with leading scientific research. Their mischaracterization of SP permeates their work featured in *Educational Psychology*. Bowers describes comprehension as an alternative to phonics instruction, but proponents of SP suggest that comprehension and phonics are complementary (Buckingham, 2020).

“For reading scientists, evidence that the phonological pathway is used in reading and significant in beginning reading is about as conclusive as research on complex human behavior can get” (Buckingham, 2020, p. 108). Moreover, Stanovich (2000) explains that utilizing direct instruction in alphabetic coding promotes early reading acquisition and is one of behavioral science's most conclusive

research practices (Buckingham, 2020). Torgerson et al. (2006) concluded that SP instruction within a broad literacy curriculum promotes children's literacy progress more than other instructional methods. Therefore, solid scientific research favors systematic reading instruction over different reading methodologies.

Systematic phonics encapsulates one of the most prominent and consistent educational evidence-based instructional literacy methodologies (Buckingham, 2020). "There is no disagreement that reading instruction needs to incorporate both meaning and phonology ultimately, but the widespread consensus in the research community is that instruction needs to systematically teach children the grapheme-phoneme correspondences before meaning-based strategies are emphasized" (Bowers, 2020, p. 685). Therefore, it is absurd to consider using alternative teaching methods with much weaker support or no evidence. Educators must implement strategies with the most robust base, utilizing systematic phonics.

A Theoretical Reflection on Cognitive Literacy Theories and Instructional Models Towards Cracking the Literacy Code

One complication of systematic phonics research is that it should be embedded within a broader literacy curriculum (Bowers, 2020). Yet, schools and teachers worldwide endorse (or even dictate) various instructional methodologies, making educational research challenging to organize, perform, and apply. Variances between literacy models and the belief that systematic phonics should be embedded in every literacy instructional method make assessing the efficacy of systematic phonics challenging.

Characteristics of Evidence-Based Reading Instruction. Bowers' (2020) exhaustive twelve-part meta-analyses indicate that any method of reading instruction is motivated by these characteristics:

1. Written words have pronunciations.
2. Written words have meaning.

3. Words are composed of parts, including letters and morphemes.
4. Written words tend to occur in meaningful texts.
5. The goal of reading is to extract meaning from the written passage.

Indeed, different models of reading instruction emphasize or downplay some of these points. Still, every model contains these overarching methodologies to foster a classroom environment that develops broad literacy content and background knowledge to create strong readers.

Duke et al. (2021) emphasize that foundational word-reading is insufficient to build strong comprehension skills. Although instruction aimed at increasing students' word reading, including phonemic awareness and phonics instruction, often positively impacts reading comprehension. Their meta-analyses also found that extensive research supports a simultaneous approach to developing sentence and word comprehension rather than a sequential approach. "The relation between word reading instruction and reading comprehension instruction is more synergistic than competitive" (Duke et al., 2021, p. 666).

Simple View of Reading Theory. For approximately the past twenty years, the simple view of reading (SVR; simple view) has been widely endorsed throughout America. The simple view of reading posits that reading is the product of two factors, decoding, and listening comprehension, represented with the equation $\text{decoding} \times \text{comprehension} = \text{reading}$. The simple view presumes that, once the printed text is decoded, the reader utilizes the exact mechanisms they would apply when speaking the equivalent (Duke & Cartwright, 2021). However, the elements of the SVR theory most central to this literature study attest that word recognition and language comprehension are separate. Therefore, recent psychological and cognitive research makes the SVR theory outdated since numerous researchers have pinpointed considerable overlap between word recognition, decoding, and language comprehension in the prediction of reading (2021). Thus, the 35-year-old SVR theory must be updated

to account for several critical advances in the scientific evidence that better align instructional practices with the evolving science of reading.

Active View of Reading. Leading literacy researchers Duke & Cartwright (2021) developed a new theory they named the active view of reading to embed systematic phonics within a reading theory. Generally, their new approach expands the simple view of reading. Also, it more strongly aligns with current cognitive and psychological research that will guide current and future educators' instructional practices to support students reading development in classrooms and interventions.

The active view of reading theory outlines contributing factors rather than overgeneralizing and compartmentalizing, as was done within the SVR theory. First, the active view explicitly outlines reasons for reading deficits, which was critical information missing within the simple view reading model. Second, each element of the active view is malleable, meaning that students can sharpen phonetic skills by practicing literacy skills, such as spelling, writing, or reading. Third, readers can be taught to self-regulate their reading, and fourth, the active view theory describes word recognition and language comprehension as overlapping literacy skills (Duke & Cartwright, 2021).

A key component to a student's reading success is connecting phonetic instruction to authentic reading, spelling, and writing experiences. Duke & Cartwright's (2021) active reading theory justifies this evidence-based connection. One benefit of the active reading approach is that it welcomes educators to sharpen phonics concepts in meaningful contexts, enabling students to develop comprehension skills. Thus, exposure to comprehensive systematic phonics instruction helps students to expand their cognitive structures to help them make learned generalizations.

Since the active view of reading theory was recently developed, additional research is warranted to understand whether and how motivation and engagement contribute to word recognition and language comprehension. Plus, a study should be designed to measure the impact of student learning

under the active reading model compared to the simple view of reading (Duke & Cartwright, 2021) to verify a theoretical shift. Of course, Duke & Cartwright indicated that the active view of reading (or any other research study) could only reflect research to date. Therefore, classroom instructional recommendations must be updated or replaced as new research is done. Duke & Cartwright also advised that one negative drawback of the active view reading model is that it only addresses reader factors, not sociocultural contexts, which most certainly impacts reading development.

Moreover, given the approximately 100 instructional experiments justifying that phonics should be taught explicitly and thoroughly, plus all the meta-analyzed studies, instructional adjustments are recommended to prioritize phonetic instruction (Shanahan, 2020). Although Shanahan supported pedagogical decision-making based on the science of reading (SoR), they cautioned against instructional overgeneralizations or research supported by cognitive and neuroscience not yet applied to classroom instruction.

Synopsis of Literacy Instructional Models and Methods

Whole Language Approach. Language acquisition is taught in a literature-rich environment that combines speaking, listening, reading, and writing. Students are taught critical thinking strategies and context clues to decipher words. If words cannot be guessed, teachers utilize on-demand phonics instruction that is incidentally taught.

Typically, whole language phonics instruction is taught as part of invented spelling. Thus, the whole language instructional approach complicates phonetic research, meta-analyses, and research interpretations because students are taught to identify words out of context without breaking the terms into phonemes (Bowers, 2020; Buckingham, 2020).

Balanced Literacy Approach. Some consider balanced literacy instruction another name for whole language, given that phonics is not taught first. Others find balanced literacy a compromise between whole language philosophical approaches and those that teach the construction of meaning

(Fresch, 2016). Balanced literacy combines whole language and focuses on reading for meaning (Bowers, 2020). Indeed, proponents believe that teaching language acquisition is a balancing act. Teachers address foundational skills with phonics, spelling, and vocabulary. In reading, teachers boost comprehension with complex texts and close reading. Students learn to write across a variety of texts while opportunities to speak and listen within each subject area, too (2016). Teachers balance literacy instruction with differentiation for all students by maintaining an optimal balance. Generally, balanced literacy creates well-rounded readers and writers by presenting diverse academic opportunities for students to read and respond.

Guided Reading Instruction. Guided reading groups are an instructional technique used to provide reading instruction within a balanced literacy approach. “Fountas and Pinnell {2017} defined guided reading as a ‘context’ within which students engage with a variety of texts and are taught how to build an effective and efficient reading processing system (as cited by Quiñones & Ascenzi-Moreno, 2020, p. 138).

During 15-minute guided reading sessions, educators support students to become thoughtful, metacognitive readers who construct meaning. A guided reading group model provides teachers the structure to offer differentiated instruction to respond more effectively and efficiently to students’ diverse instructional needs. To remain informed of students’ holistic needs, teachers should utilize data assessments and daily observations to adjust instructional goals. Collected data will inform educators how to choose teaching points, select texts, and meet their learning needs to help them graduate to higher reading levels.

Guided Reading Instruction Among Bilingual Students. Guided reading related to specific populations, especially bilingual students, affects how teachers engage with students. If educators view their students as English learners, their instruction will emphasize English language acquisition. Quiñones & Ascenzi-Moreno’s (2020) research on bilingual guided reading introduces a translanguage

theory that encourages teachers to intertwine more bilingual abilities as students learn to communicate in English. Kabuto (2017) advises that reading “‘transcends language borders’ and should be viewed as a unified skill allowing students to rely on resources across languages” (as cited by Quiñones & Ascenzi-Moreno, 2020, p. 139). Translanguage theory inspires teachers to help bilingual students develop a processing system by comparing their knowledge about decoding, comprehending, and discussing texts across languages. Thus, teaching students that the same word-solving strategies apply in any language they are reading (2020). Teachers must remain mindful of their reading instructional practices by remembering how to engage the whole child, especially those who are bilingual or culturally diverse.

Historical Reflection on Federal Policy, Legislation, & Standards and Their Influence on Cracking the Literacy Code

Research has spanned several decades regarding how reading should be taught. Numerous researchers and governmental literature have documented evidence-based reading acquisition. Yet, a wide gap remains between the state of research and understanding in the public and professional domains about how to teach reading.

Federal Policy & Legislation. Since the Elementary and Secondary Education Act (ESEA) of 1965, numerous funding and accountability measures have been enacted to close the achievement gap among high and low-performing children. But, overall, federal policy has only sidelined rather than promoted quality classroom reading instruction.

National Reading Panel (NRP). In 2000 reading wars essentially caused a national barroom brawl among teachers, researchers, and the public! The discourse captured the attention of Congress, which appointed 14 researchers, educators, and parents to examine research about how to teach reading and hopefully settle the reading wars arguments with sound research-based evidence. After reviewing research under public scrutiny for two years, they issued a summary report titled the National Reading Report (Cunningham, 2001). The committee outlined findings that are now the cornerstone of

U.S. federal reading education policy and present standards of instructional practice for teaching literacy (Shanahan, 2003).

The National Reading Panel appropriately emphasized five critical instructional practices vital to any comprehensive literacy program, including reading instruction, categories of phonemic awareness, phonics, fluency, vocabulary, and comprehension. However, the “impact of the research was muted and limited” (Dewitz & Graves, 2021, p. S132). The researchers made discoveries that shifted student achievement, but unfortunately, it was not instantly applied in U.S. classrooms. Thus, the NRP did not substantially impact reading instruction, policy, curriculum, classroom practices, or national test scores until years later.

Only within the past five years have the outcomes from the NRP impacted classroom instruction. The current discussions regarding the science of reading (SoR) confirm much of what the NRP outlined twenty years ago. First, researchers have realized how prior knowledge and diverse content knowledge affect reading comprehension when students learn to read (Dewitz & Graves, 2021; Heller, 2022; Hudson et al., 2021). Second, educators understand how to appropriately teach multilingual students to read in English (Heller, 2022; Quiñones & Ascenzi-Moreno, 2020). Third, utilizing digital literacy to learn information (Heller, 2022). Fourth, reading instruction is complex, and students must be provided explicit, systematic instruction to learn how to read (Heller, 2022; Hudson et al., 2021).

Bowers (2020) argues that the NRP failed to obtain evidence in support of systematic phonics instruction throughout grades K-5. Bowers feels the most critical limitation of the NRP is that systematic phonics did not help children beyond first grade. Therefore, schools should only teach phonics early (Bowers, 2020; Buckingham, 2020). Second, the authors of the NRP did not assess whether long-term benefits extend to spelling, reading texts, or reading. Third, the NRP used a sub-analytical report, rather than an overall effect size, to justify recommending systematic phonics should be taught in schools (Bowers, 2020). Bowers also warned that their findings should not be misconstrued in support of whole

language or other related methods. They simply attest different alternative approaches to reading instruction should be explored.

Buckingham (2020), one of many researchers, refutes Bowers' (2020) claims and uses them to prove their point. Buckingham, like Bowers, believes "teaching practice and education policy should be based on the best available evidence unless and until it is superseded by new information and new evidence" (Buckingham, 2020, p. 105). They debate that education research cannot be conducted in laboratories under pure experimental conditions like Bowers proposed. "Clinical experiments provide valuable information about how the brain learns to read, but until this is translated and tested in classroom practice, it is of little practical value for teachers and students. The question, therefore, is what method(s) have the greatest weight of evidence" (Buckingham, 2020, p. 105).

No Child Left Behind (NCLB). NCLB became federally mandated educational legislation in 2002, which most notably required high-stakes accountability tests by providing school rewards or sanctions based on the number of students performing at or above grade level (Datnow & Park, 2018).

Indeed, the act caused the public, legislators, and school officials to overemphasize summative testing. One unintended consequence is that schools now engage in "educational rationing and triage" by using state assessment data to determine which students are on the "bubble" of grade-level proficiency and then investing resources to push them over the threshold. This described "educational triage" has unfairly disadvantaged many students (Datnow & Park, 2018).

NCLB narrowed published reading curricula, too (Dewitz & Graves, 2021; Miles et al., 2018). Teachers began presenting short, closed reading passages that simulated test-taking conditions instead of novels or longer nonfiction texts. Student motivation and the joy of reading and learning declined with an overemphasis on close reading, which has now been negated as a best practice (2021).

Overall, teachers began to focus too much time on teaching toward high-stake tests and not enough time on critical research-based factors such as prior knowledge and metacognition. Therefore, educators and policymakers need to be careful not to confuse data and accountability moving forward.

National Assessment of Educational Progress (NAEP). The National Assessment of Educational Progress (NAEP) was organized to monitor how well Black and Brown children read. Student performance in the last administration of the NAEP showed that one in five African American and Hispanic fourth-graders read at or above proficient levels, compared to one in two White students. From 2017 to 2019, NAEP reading achievement scores declined among the lowest performers, predominantly Black and Brown children growing up in poverty (Terry, 2021). Both statistics indicate the achievement gap is not narrowing despite research and legislation to alter it.

State Educational Standards. Common Core State Standards (Common Core or CCSS). The criteria of Common Core, rather than the standards themselves, have affected classroom literacy instruction the most. First, CCSS prioritizes close, sustained reading, which often requires significant background knowledge outside the reading passage. This causes a conflict between the standards and teaching criteria (Dewitz & Graves, 2021). Second, CCCS outlines ten reading comprehension anchor standards but leaves it up to curriculum developers, schools, and teachers to determine how they should be met (Miles 2018). This ambiguity sidelined previous research and immediately made teachers betray evidence-based instructional routines that could have helped students meet Common Core Standards. Third, the criteria of CCSS shifted reading instruction by demanding more complex reading passages.

Cracking the Code: Evidence-Based Classroom Literacy Research

The Science of Reading

Numerous meta-analyses research projects have studied the science of reading (SoR) because it is currently a hot topic in the media, schools, classrooms, and among researchers and policymakers

(Heller, 2022; Terry, 2021). The science of reading debate captured the media and public's attention when Emily Hanford (2018), a correspondent/journalist for America Public Media (APM), recorded a podcast exposing the flaws with educators' reading content knowledge and questioning why teachers do not know how to teach reading based on scientific research.

Research surrounding the SoR is fundamental, but it may also be flawed given how researchers study, construct and publish knowledge. Indeed, teaching students how to read is an honor educators provide students so they may live their best lives. Therefore, teaching reading well is particularly important for the future of America's students and the country's general prosperity. Thus, researchers and educators must reframe the SoR battle to promote strong instructional literacy practices instead of politicizing reading (MacPhee et al., 2021).

Educators must be able to depend on researchers' instructional claims since they do not have ample time to do it themselves. First, research should be performed and summarized to improve learning among teachers and students in various conditions (Shanahan, 2020a). Second, robust experimental methods must be implemented to ensure consistent, reliable, valid, and replicated results. Additionally, studies must be consistently and adequately meta-analyzed (2020a). "Basic research has an important role to play in reading science but can never be the final detriment of practice or policy; that should always depend on studies that directly evaluate the effectiveness of practice or policy" (p. S244).

While educational researchers need to provide quality literacy research, it is just as vitally important that educators use discrepancy to evaluate between basic SoR research and successful instructional approaches. "No matter how good the ideas of basic research, they must be tried out instructionally and show to be beneficial in improving reading ability or its dispersion in some way before they should be recommended to educators and policymakers" (Shanahan, 2020a, p.S241).

Definitions of the SoR. Science of reading (SoR) generally refers to the research used to inform reading instruction over the past several decades. However, everyone utilizes a different definition of the phrase.

In Heller's (2022) research, they presented two scholarly definitions of the SoR. One, written by Steven Graham, states, "The science of reading involves studying how reading operates, develops, is taught, shapes academic and cognitive growth, affects motivation and emotion, interacts with context, and impacts context in turn" (p. 33). Whereas veteran researcher, Patricia Alexander, explains, "I see the science of reading as contributing to a vast interdisciplinary store of critical information about reading-related skills, process, antecedents, and outcomes, representing linguistic, cognitive, social, cultural, neurological, and psychological dimensions" (p. 33). Indeed, both definitions reflect that the SoR describes a diverse set of research studies that suggest teaching students with systematic phonics is the most reliable method to teach reading. Additionally, the SoR term includes phonemic awareness, phonics, reading fluency, vocabulary, comprehension, language development, motivation, and culturally responsive instructional practices.

Castles et al. (2021) warn that the current use of the SoR term refers to the cognitive and neuroscience research that has not been aptly applied to classroom instructional practices. Thus, some propose that the current SoR term or definition is contradictory because researchers and educators are not using SoR research to inform instructional practices. However, Shanahan (2020a) posits that the importance of explicit teaching of phonological awareness, oral reading fluency, reading comprehension strategies, text structure, use of complex text, and the impact of writing on reading should be considered within a working definition of the SoR instruction.

Interpretations of the SoR term can be informative and divisive. Therefore, Heller (2022) suggests SoR conversations are most effective when the term remains broad, bridges perspectives, and

shares accurate, evidence-based, and meaningful understandings to promote robust classroom reading instruction.

History of SoR. According to Shanahan (2020a), the term science of reading has been used for 200 years and most often refers to the pronunciation and decoding of words. Yet, during the early 19th century, the SoR term explained how citizens should read the Koran or Bible. But since the 1830s educational professionals have utilized the term pedagogically.

A comprehensive report of the National Reading Panel produced by Dr. James Cunningham (2001) of the University of North Carolina linked literacy instruction with scientific evidence. The panel encouraged a scientific understanding of reading development and instruction by utilizing various scientific research tools, methods, and experimentation to prove that alphabets (such as phonemic awareness) are essential components of a solid reading program. Thus, the NRP elevated systematic phonics instruction, but its research did not become widely accepted or appreciated until almost a decade later.

Most recently, the SoR discourse became prominent after Hanford (2018), an APM journalist, introduced the topic in her podcast sponsored by the International Dyslexia Association (Shanahan, 2000a). Moreover, Dewitz & Graves's (2021) and Heller's (2022) research summaries suggested that the SoR might be responsible for starting, yet again, another reading war. Nonetheless, the science of reading research refutes several long-standing reading instructional practices and theories from various approaches and psychological studies that question existing strategies and methods.

Applying the SoR in Classrooms. *Teacher Preparation and the SoR.* Hudson et al. (2021) from Texas A & M University in College Station, Texas, investigated the impact of teacher preparation programs on SoR knowledge. A teacher's future success requires a depth of content and pedagogical expertise to teach students how to read. Thus, building quality and depth within teacher preparation programs is critical. If these skills are lacking, efforts must be implemented to increase their knowledge.

Upcoming teachers need training and opportunities to apply their knowledge and skills under expert guidance to improve teacher growth and student achievement significantly (2021). Therefore, Hudson et al. advise that future research should include triangulated evaluation, including observations of classroom instruction, teacher interviews, and an analysis of student achievement measurements to clarify how teacher knowledge translates into practice.

Curricula cannot replace a knowledgeable teacher that understands the science of reading. However, the emphasis on explicit instruction places enormous expectations on teachers' content knowledge because teachers cannot be expected to provide solid instruction if they do not understand basic literacy principles (Hudson et al., 2021). Therefore, more focus needs to be centered on preparing teachers with literacy content knowledge at the collegiate level as research demonstrates college graduates misunderstand foundational literacy skills (Hudson et al., 2021; Quiñones & Ascenzi-Moreno, 2020). Collegiate teacher preparation programs must increase teachers' understanding of phonological awareness, phonics, and morphological awareness (2021). In fact, Quiñones & Ascenzi-Moreno suggest collegiate standards should establish specific criteria for what constitutes an appropriate amount of content and pedagogical knowledge to teach solid phonics and literacy skills.

SoR's Impact on Diverse Populations. To implement effective literacy instruction, one must consider students' home learning environments, previous background knowledge, life experiences, and pedagogical strategies. Unfortunately, research related to the SoR does not always reflect actual, authentic student populations in today's classrooms. Terry (2021) believes SoR research does not go deep enough to address inequalities among Black and Brown children. Similarly, Shanahan (2020a) and Milne (2020) posit that too many children are leaving school and cannot adequately read. Undoubtedly, their futures will always be limited if they do not learn to read. Due to socioeconomic disparities, language development is especially problematic for Black students who frequently do not access

dynamic preschool environments (2020). Thus, Milne focused their quantitative and qualitative research meta-analysis on disrupting implicit and overt racism regarding the SoR movement.

The at-large educational community must be careful about misusing research and performing tests and experiments that embrace multiculturally diverse student populations. Milne's (2020) study showed racism is deeply rooted in SoR research. Additionally, given contemporary critical race theory perspectives, Milne believes racism can only be improved, not eradicated, at this moment in history. They challenge educators to disrupt "racist, inequitable, homophobic, xenophobic, and sexist worldviews, policies, and actions that maintain master narratives or storylines, which perpetuate whiteness" (p. S252). To foster culturally responsive instruction, Quiñones & Ascenzi-Moreno (2020) claim the most effective instructional tool teachers should offer is their understanding of the reading process. Educators must expand their reading instructional practice by remembering how to engage the whole child, especially those bilingual and of diverse backgrounds.

Duke and Cartwright's (2021) research surrounding the simple view of reading theory revealed that cultural and content knowledge impact student reading success, decoding, and listening comprehension. Since these generalizations were not accounted for in the SVR theory, it was one reason they developed the active reading theory. Now researchers validate that reading is context-dependent. Thus, social justice issues and cultural background knowledge are relevant to instructional content (2021).

SoR Instructional Impact. Science of reading research encouraged the development of robust curricula and instructional practices that must be continuously monitored to ensure their effectiveness. Heller (2020) outlined several reflective questions to guide educators' instructional decisions.

- How might we teach foundational reading more effectively?
- How should we promote high-level literacy skills?
- How might we differentiate learning to meet diverse student needs?

- What might we do to better serve students from diverse linguistic and cultural backgrounds?

SoR Research & its Impact on Reading Comprehension. Dewitz & Graves (2021) focused their historical meta-analysis on reading comprehension. They advocated students need time to internalize and apply comprehension strategies. Thus, reading comprehension research takes time, even years, not just a few months. Therefore, much research on reading comprehension instruction has not been proven or justified. The public and educators must support researchers and curricula companies that bridge research and instructional reading processes.

Teaching literacy based on SoR principles should not be scripted nor undermine solid teaching or hamper teachers' joy (Heller, 2022). Instead, the better educators understand what science reveals, the more confident they should become in their knowledge and expertise. When Heller (2022) interviewed Amanda Goodwin, a co-editor of *Reading Research Quarterly* and an associate professor at Vanderbilt University Peabody College of Education in Nashville, Tennessee, to compile her knowledge and perceptions about SoR research, she maintained, "Teachers don't need to be told how to teach reading. Rather, they must be informed about what researchers have learned to teach it more successfully. The better they understand what science says, and the more confident they are in their knowledge and expertise, the more they can inform their practice" (as cited by Heller, 2022, p. 36).

Educational professionals choosing district reading curricula must be informed of recent research to ensure the chosen curriculum aligns with evidence-based research, not just current best teaching practices. Dewitz & Graves (2021) recommend schools seek a curriculum that is easily implemented and aligns with state/district standards; districts should pick flexible, adaptable, and easy-to-implement curricula. Teachers should readily be able to envision how they might apply new procedures in their classrooms to support their students. Furthermore, when adopting a new

curriculum, it should be accompanied by staff development, written curriculum guides, plus instructional materials that make the embedded research easy to apply.

Applying the Cracked Code: SoR Implications for Classroom Literacy Instructional Practices

Teaching Phonics

Scientific research offers an overwhelming consensus about elevating phonics instruction during the initial stages of learning to read (Castles et al., 2021; Heller, 2022; Shanahan, 2020a). SoR advocates widely recommend direct Instruction grapheme-phoneme relationships to build effective, robust reading skills among children in the primary grades (Buckingham, 2020; Castles et al., 2018; Miles et al., 2018; Shanahan, 2020a). For example, phonemic awareness is developed when training students to synthesize rhyming words, count phonemes, or identify spelling patterns. Consequently, training students to use rhyming words, count phonemes, and identify spelling patterns develops their phonemic awareness.

Despite Bowers' (2020) arguments against systematic phonics (SP) research, he argues methods that prioritize SP instruction are better than whole language approaches. Instead, their primary rebuttal is that proving the efficacy of systematic phonics is too complicated given how much various theories overlap throughout classrooms.

Cracking the alphabetic code is crucial and forms the foundation for all literacy skills that develop later. Numerous studies reflect superior outcomes when students are systematically and explicitly taught letter-sound correspondence and how to blend and segment them to read and spell words; their odds of becoming independent, successful readers exponentially increase (Buckingham, 2020).

Teaching Spelling

Word pronunciation is strongly tied to spelling. Templeton (2020) asserts that spelling is not a convention of writing. Instead, it is linked to students' orthographic knowledge. Therefore, educators

must teach emergent readers how to encode and decode efficiently. “Once morphological regularities between spelling and meaning are discovered, orthographic learning does need to proceed one item at a time” (Castles et al., 2018, p. 23). Despite the technological advances of spell-check and voice recognition software, research proves how essential spelling instruction is.

Theory matters when guiding young students to learn how to spell and read. Miles et al. (2018) outline three layers of orthography, or spelling, in the English language- the alphabet layer, the pattern layer, and the meaning layer. Students’ understanding of the layers progresses through four predictable stages of spelling development outlined below (Ehri, 2014; cited by Miles et al., 2018; see also Templeton, 2020).

1. Pre-Alphabetic Phase- Readers rely on a word’s shape or environmental context.
2. Partial Alphabetic Phase- Beginning readers start to create appropriate sounds to read and spell words.
3. Full Alphabetic Phase- Readers use grapheme-phoneme information to pronounce words and can provide phonetic representations of each sound.
4. Consolidated Alphabetic Phase- Readers rely on graphosyllabic connections (e.g., cred-, -tion & -dle) and spell words proficiently, applying knowledge.

Miles et al. (2018) research acknowledged Ehri’s (1992, 1997, 2011, & 2014) connectionist theory and the four stages learners progress through as they learn to spell. “Words are most efficiently stored when visual, phonological connections are established between the spelling and pronunciation of words” (Miles et al., 2018, p. 715). Undoubtedly, teaching students how to spell unknown words with orthographic knowledge systematically improves reading skills and retention.

Elementary students in K-2 frequently utilize invented spelling. Encouraging learners to use invented spelling helps students develop orthographic knowledge and mapping skills while gaining a deeper understanding of the logic of the English language (Templeton, 2020). Therefore, invented

spelling is an appropriate evidence-based method that should be optimized throughout learners' language development journeys.

Teaching Sight Words and Language Recognition

“It is estimated that from the middle of childhood onward, children learn approximately 3,000 new words per year” (Castles et al., 2018). Educators often present word lists, flashcards, or clever mnemonic drills to prompt students' memory of sight words to expedite this process. Miles et al. (2018) historical meta-analysis proved these techniques are outdated. Instead, students should be explicitly taught grapheme-phoneme analysis/knowledge to spell, pronounce, and understand sight words because recall is more immediate when taught using grapheme-phoneme instruction (Miles et al., 2018).

Part of Miles et al. (2018) meta-analysis research evaluated sight word instructional theories originally presented by Carine, Kame'enui, Jungjohann, Silbert & Tarver (2006). Sight word patterns typically fall into three categories explained below.

1. Regular spelled- Sight words in this category follow standard grapheme-phoneme conventions.
2. Temporarily Irregularly spelled – A category used to organize words that students haven't learned the grapheme-phoneme pattern. However, once they are taught those patterns, those sight words are no longer considered irregularly spelled (e.g., diphthong, words ending with -tion). Indeed, most Fry & Dolch sight words are regular or temporarily irregular words.
3. Permanently Irregularly Spelled- Sight words with idiosyncratic spelling patterns fall into this category. (e.g., words may contain silent letters).

If teachers carefully analyze classroom sight word lists, they can identify regular and temporarily irregular spelled words that might be suitable for explicit graphophonemic instruction. Miles et al. (2018) suggest reconsidering word wall organizations based on phonetic spellings.

Undoubtedly, research validates students can learn sight words in tandem with systematic phonics instruction. “To become confident, successful readers, children need to learn to recognize words and compute their meanings rapidly without engaging in translation back to sounds. Therefore, it is important to understand how children progress to this more advanced form of word recognition and how teaching practices can support this” (Castles et al., 2018, p. 6).

Teaching Reading Comprehension

Reading comprehension is multi-faceted. Reading is more than phonics. Phonics and comprehension are complementary (Bowers, 2020). Solid phonemic awareness is crucial, but young learners need more than phonics to become skilled readers. “In the early stages of reading development, word reading is the stronger predictor of reading comprehension, but once decoding is fluent, language comprehension becomes more important” (Buckingham, 2020, p. 106).

Foundational word-reading is not enough to build strong comprehension skills. Instruction targeted at improving students’ word reading, including phonemic awareness, and phonics instruction, positively influences reading comprehension (Bowers, 2020). “The relation between word reading instruction and reading comprehension is more synergistic than competitive” (p. 666). How students approach and gain word reading skills determines their reading comprehension level in the early stages (Castles et al., 2018). Reading comprehension cannot be narrowly explained. “Instead, it is the orchestrated product of a set of linguistic and cognitive processes operating on text and interacting with background knowledge, features of the text, and purpose and goals of the reading situation” (p. 28).

Fundamentally, reading comprehension is about making inferences and varies among all. Castles et al. (2018) argue that inferences and reading can happen automatically, but readers can also deploy

comprehension strategies. Reading comprehension depends on the purpose for reading, motivation, background knowledge and interest, quality of the text, and so on. Nonetheless, skilled readers can be taught to modify their behaviors depending on the purpose and demands of the task. Castles et al. (2018) demonstrated that comprehension strategies could be learned quickly and applied to new reading material even after little instruction.

Self-regulation plays a vital role in reading. Skilled readers deploy active, strategic, executive skills to manage tasks. Therefore, educators must teach students how to chunk words to decode them alongside strategies to decipher unknown words. In fact, Duke & Cartwright (2021) proved that teachers could predict students' reading abilities by how well they visualized and monitored comprehension.

SVR and Reading Comprehension. The simple view of reading (SVR) theory believes word recognition and language comprehension are separate. Bowers (2020) viewed them as independent of each other, too. Bowers' meta-analysis described comprehension and mixed interventions as alternatives to phonics instruction (Buckingham, 2020). Yet, at the same time, Bowers also acknowledged research supported a simultaneous approach to developing sentence and word comprehension rather than a sequential approach. Contrary to SVR and Bowers, researchers found considerable overlap between word recognition, decoding, and language comprehension (Duke & Cartwright, 2021). Advocates of SP understand teachers should teach explicit and systematic phonics instruction alongside meaning-based instruction, including morphology, vocabulary, and comprehension past first grade (Buckingham, 2020).

Morphology. When Heller (2022) interviewed Amanda Goodwin, a large portion of their interview focused on the SoR's role in teaching morphology (e.g., root words, prefixes, and suffixes, formal and informal, negative, or positive, opinion or fact). She acknowledged that students in 3rd or 4th grade might readily be able to decode texts well if they were taught with a SoR-supported curriculum during the early elementary years. Although learners might understand much of a topic and its

vocabulary but do not understand the contextual features of the words and sentences, they will eventually encounter roadblocks. Thus, teachers must explicitly teach morphological skills such as how prefixes modify words and how ideas are communicated in word order and sentence structure. Ultimately, literacy teachers must never forget the primary goal of reading is being able to understand the text. Therefore, reading should be taught in a manner that supports reading comprehension development.

Encouraging and Growing Student Motivation to Read

Motivation activates dynamic reading behaviors that lead to incredible academic achievements. “The relation between proficient reading and motivation is synergistic” (Bowers, 2020). Teachers should leverage their classrooms and instructional practices to motivate and instill a love for reading. For example, they should plan meaningful read-alouds or provide many choices in well-organized classroom libraries so kids want to read. Teachers must create such extraordinary reading atmospheres that students cannot resist the urge to read!

Importance and Significance of Classroom Read-Alouds

Sharing read-alouds is a powerful instructional and motivational tool for classroom teachers. Teachers should leverage read alouds to reinforce literacy skills being taught in the classroom. Therefore, Campbell (2021) warns educators not to push aside them amid prioritizing phonics in primary classrooms.

Milne’s (2020) metaanalysis of quantitative and qualitative studies evaluated racialized questions, issues, and instructional practices related to the science of reading. Milne discovered that Black students were motivated to read when introduced, encouraged, and allowed to read meaningful texts. Thus, Milne argues that reading, building meaning, and motivation are deeply connected. Therefore, educators must provide, introduce, encourage, and allow Black students to select meaningful read-aloud texts that build cultural connections. In 1990 Bishop profoundly declared that “literature has the

potential to reflect the reader {mirrors}, provide a view into other people's life-worlds {windows}, and concurrently allow teachers to walk into narratives of text {sliding glass doors}" (p. S251).

Read-alouds give educators authentic opportunities to teach decoding, find meaning in texts, learn how to use texts, critique texts, and analyze the visual properties of texts. Teachers should utilize read-alouds to explicitly instruct students on monitoring their metacognition before, during, and after reading (Campbell, 2021). Additionally, read-alouds provide opportunities to build morphological awareness and enhance reading abilities (Duke & Cartwright, 2021). Finally, following read-alouds with text discussion and analysis will further boost students' literal and inferential comprehension (Campbell, 2021).

Promote Vocabulary Acquisition and Build Background Knowledge. Students need broad content or background knowledge to become strong readers (Bowers, 2020). Educators must be mindful of making learners active, not passive, participants during read-alouds to develop print knowledge and vocabulary, expose them to different text structures, and model a love of reading. Strong vocabularies increase word recognition, which can be enhanced using daily classroom read-alouds. Quiñones & Ascenzi-Moreno (2020) stress that read-alouds build emergent readers' vocabularies and sharpen their comprehension skills. Therefore, using read-alouds to introduce academic language that is not typically used in students' homes is essential.

Cultural and academic background knowledge, developed within family and community, contributes to reading comprehension (Bowers, 2020). Therefore, teachers should prioritize becoming acquainted with their students and interacting with the community to form judgments about what texts might be culturally relevant to their students. Kelly et al. (2021) advise teachers should be cautious not to merely select texts that feature people of a specific heritage or traditional cultural background and then consider them culturally responsive. Instead, teachers should consider the pop culture and cultural values their youth affiliate with as well.

Fine-tuning the Cracked Code: Professional Factors and Considerations for Promoting Robust Literacy**Instruction*****Culturally Responsive Literacy Instructional Practices***

Research compiled by Gabriel (2020), Milne (2020), Quiñones & Ascenzi-Moreno (2020), and Terry (2021) reflect that SoR research is flawed and not fool-proof regarding multi-cultural populations. SoR research does not reflect authentic student populations in today's classrooms. For example, Milne (2020) found that when Black children are labeled "dyslexic" or "at-risk," complications arise because Black families believe something is innately wrong with their children. Furthermore, Milne (2020) advises the SoR research undermines Black families because proponents stress the importance of early language and literacy development, and frequently, Black students do not have access to solid preschool settings due to socioeconomic disparities. Gabriel (2020) advised researchers to interrupt the status quo and include diverse populations of students that will inform evidence about curriculum materials and educational assessments.

Educators and the public need to relay a sense of urgency about the achievement gaps and educational disparities documented among Black and Brown children as the SoR impacts research, policy, and practice (Datnow & Park, 2018; Terry, 2020).

"It is important to unite practical and intellectual, applied and theoretical in the science of reading because no single piece of content or pedagogy, be it phonics knowledge or cueing systems, explains or remediates the profound educational debt owed to students with learning differences as well as communities of color, immigrants, native peoples, and the economically disadvantaged" (Gabriel, 2021, p. 17).

Researchers must identify and remove systematic barriers preventing educators from implementing researched and practiced methods that might resolve these long-standing problems. Therefore, Gabriel

(2021) advised educators to try a new instructional approach. Instead of focusing on students' weaknesses, educators should emphasize their strengths.

Kelly et al. (2021) meta-analyses evaluated theories, methods, and student outcomes to advance the field of culturally informed literacy. They reported that culturally relevant pedagogy endorsed by Ladson Billings (1995) included the following criteria:

1. Students must experience academic success.
2. Students must develop or maintain cultural competence.
3. Students must develop a critical consciousness that challenges the status quo of the current social order (as cited by Terry, 2021).

How might educators encourage pedagogical growth among culturally diverse student populations? Researchers must conduct studies that include diverse and vulnerable learners to present adequate empirical evidence to ensure their success in school and especially in reading (Terry, 2021). Promoting culturally informed instructional practices require teachers to be willing to learn about student culture and craft responsive to reflect local cultural practices (Hudson et al., 2021; Kelly et al., 2021). Thus, the reason educators must possess a depth of content and pedagogical knowledge to teach students how to read that are socially and culturally responsive. If these skills are lacking, professional learning must be implemented to develop culturally informed understandings.

Literacy Informed Data Practices. Teacher ownership of student achievement data is crucial and must be leveraged appropriately. Data examples that improve student learning and instructional strategies are listed using frequency in descending order: short, formative assessments, state-wide standardized test scores, classroom observations, attendance, and demographic data (Sun et al., 2016).

The way school leaders use data maximizes or limits students' opportunities. Studying data provides opportunities for conversations that identify problems, create action plans, challenge stereotypes, examine student growth/weaknesses, differentiate instruction, and develop a collaborative culture.

Statistical data confirms assumptions and challenges beliefs.

Data dives provide opportunities to converge multiple angles, vertical alignments, and historical examinations. However, utilizing data to increase test scores leads only to short-term success. Therefore, data practices must be focused on learning instructional approaches for long-term continuous growth. Furthermore, framing conversations with an appropriate teacher lexicon is critical during data analysis meetings, so assumptions are challenged instead of reinforced (Datnow & Park, 2018). Data examination should not focus on single measures since those practices frequently disadvantage low-income minority students (Datnow & Park, 2018). For example, data use for tracking and long-term ability grouping reinforces inequitable hierarchies. Educational professionals must remember that data practices and protocol can profoundly affect students' educational experiences and trajectories.

Data Intervention Teams. Collaborative intervention data teams inform rigorous curriculum design and provide opportunities to share best practices, strategies, and ideas. They promote strong relationships and shared responsibility. Collective professionalism builds trusting relationships because teachers must provide feedback and engage in dialogue (Sun et al., 2016). However, building a robust team-building culture takes time. Relationships will develop as trust deepens, but it takes time (Datnow & Park, 2018).

Educators must approach data reviews with an appropriate mindset. Data can validate instructional strategies or address concerns. Narrowing data at the teacher or classroom level prevents educators from broadly analyzing it and reinforces inequities. Indeed, caution must be exercised if student characteristics are offered to explain results, as they might strengthen a culture of low expectations and stereotypes (Datnow & Park, 2018). Therefore, educators must exercise mindfulness to ensure inequitable assumptions are not made when analyzing data.

School leaders or teacher leaders must train educators to maximize data utilizing professional learning communities (PLCs). They must lead and organize data discussions to engage their faculty and maximize collaboration since positive, open atmospheres stretch teachers to speak their minds freely. Coaches or other instructional leaders are critical for framing or re-directing conversations around students' assets versus limitations. Leadership's influence on how data is used can either focus or turn away accountability, continuous improvement, and equity concerns (Datnow & Park, 2018). Therefore, school leaders must develop and discuss vision, norms, and goals to sustain data-driven work when leadership is no longer actively involved.

Additionally, school leaders must support teams with time, money, emotional support, distributed leadership, and knowledge. Sustained school leadership throughout data interventions is crucial. Leadership turnover makes sustainability precarious (Sun et al., 2016).

To summarize, the field has been plagued by decades of reading wars. Literacy experts and researchers strongly agree that teaching phonological connections between speech and print is essential to early reading acquisition. Meta-analyses of reading research consistently find that methods of literacy instruction that include systematic phonics instruction are more effective than methods that do not. The most robust evidence shows explicit, systematic instruction to be more effective than any existing alternative. Despite this, a wide gap remains between the state of research and how to translate this knowledge into effective classroom practices that maximize learning for culturally diverse students.

Methodology

Given the research and data, the Seven Hills Literacy specialists gleaned from various professional development opportunities throughout Summer 2020 through Spring 2022, administrators and the team of literacy specialists contemplated instructional modifications to align with current research more closely. Seven Hills literacy specialists gathered for a meeting on March 11, 2022, to

converse on how they might move toward developing a more SoR-based literacy program. To do so, the team reflected on evidence-based research they read by Wexler (2019) and Burkins & Yates (2021).

The specialists' discussion covered poignant topics, including how they might steer SHPA classroom teachers' literacy instruction and professional mindsets toward an approach implementing SoR approaches. They questioned whether literacy focuses should differ in grades K-2 compared to grades 3-5 and whether the changes should involve Tier 2 and 3 students or affect all learners. Indeed, any proposed instructional changes must align with diagnostic and assessment changes.

Given all the structural changes the team contemplated, they also questioned their roles and duties as literacy specialists. Their functions might need to be adjusted to provide more embedded professional development rather than solely focusing on delivering tiered interventions (Seven Hills Literacy Specialists, 2022). Eventually, the dialogue navigated the group to organize a survey to gather SHPA teachers' voices and input regarding any changes that might be promoted to enhance literacy instruction for Seven Hills scholars.

Participants

Seven Hills Preparatory Academy is an award-winning K-8 classical education charter school founded in 2006. It is a Title I school focused on increasing student achievement and decreasing achievement gaps. As of 2018, the most recent data posted on Seven Hills' website indicates that "SHPA's student body consist[ed] of approximately 37% students of color, 36% free and reduced lunch, and 16% special education" (*School Report Card*, n.d.) Yet, SHPA students performed at a high academic level. As of 2018, the elementary schools were "83.6% proficient in reading, 79.9% in math, and 85.7% in science" (*School Report Card*, n.d.).

Seven Hills enrolls over 1100 students and employs more than 70 elementary staff at the Bloomington Campus and 28 at the Richfield Campus (*Seven Hills Preparatory Academy 2021-22 Annual*

Report, p. 13-19). Of those employees, 23 K-5 classroom teachers work on the Bloomington Campus, and 12 K-5 teachers work in Richfield. Therefore, 35 K-5 classroom teachers were invited to join the action study and complete the literacy survey.

Materials

SHPA literacy specialty team members on both campuses collaborated to organize a survey highlighting ten significant themes relating to K-5 literacy instruction at SHPA. The survey reflected essential components of literacy instruction at Seven Hills, including Words Their Way, Reading Power lessons, Daily 5 practices, guided reading instruction, and summative assessments. Other survey sections reflected broader teaching demographics, literacy practices, techniques, teaching experience, and literacy-related philosophies and values.

A survey was developed and sent to every K-5 teacher at Seven Hills Bloomington Campus and Richfield Campus to compile qualitative and quantitative data regarding each classroom teacher's perceptions and effectiveness for teaching literacy skills during each grade level's 75-minute ELA block. The primary outcome of interest was that survey results would reveal more explicit, direct, and intuitive practices that might strengthen literacy interactions at Seven Hills. Indeed, it should be noted that the organization, methods, and techniques SHPA teachers were utilizing when completing the literacy survey were considered typical instructional procedures for at least seven years within the Seven Hills academic community.

Beyond the literacy survey, peer-reviewed literature was examined to learn effective methods to enhance literacy instructional methods, maximize professional development, and boost instructional coaching to help Seven Hills classroom teachers maintain robust classroom literacy instruction within a classical education school.

The central questions explored throughout the action study research project were:

- Was there evidence for improvement in SHPA literacy classroom practices?
- If so, what research-based changes might improve literacy instructional practices?

Procedure

The Institutional Review Board (IRB) of Northwestern College in Orange City, Iowa, granted research approval on June 17, 2022. The survey period extended from June 21, 2022, to July 5, 2022, which equated to a total of 3.5 weeks and boasted a 94% return rate. Participating teachers were asked to select literacy instructional practices most closely aligned with their philosophies, rate various topics, or assume competence levels. Moreover, a free-form comment box was included in almost every survey section to allow participants space to share their ideas, suggestions, and comments for improving literacy instructional practices at Seven Hills. The literature review portion of the action study research project extended 1.5 months.

Design

Each survey question presented aligned with the action study's objectives and thesis. Questions within the survey were posed in several ways, including closed, open-ended, and scaled queries. The Seven Hills literacy specialist team spent one-week refining questions to ensure participants could complete the survey within 7–10 minutes. Participants' anonymity was preserved by not asking for names or email addresses. However, classroom grade level information was collected so the survey data could be classified, sorted, analyzed, and compared based on grade levels, since literacy instructional standards vary significantly among the primary to intermediate grades.

The survey was organized and presented to participants within Google Forms via the participants' school email accounts. Therefore, survey answers were automatically saved within Google

Sheets and later converted into a Microsoft Xcel spreadsheet. The survey, Google Sheet, and Xcel spreadsheet will be stored on Seven Hill's Google Cloud Database until September 2, 2022.

Data Analysis

Thirty-three teachers responded to the survey, including six kindergarten, six first-grade, six second-grade, four third-grade, six fourth-grade, and five fifth-grade teachers, which equated to a 94% response rate.

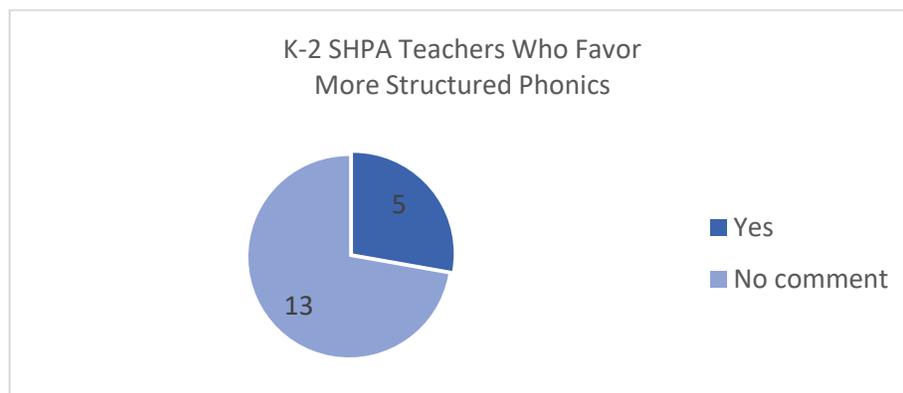
The Seven Hills literacy specialists collectively evaluated the survey data. The team identified and highlighted repetitive words and phrases that stood out as the participants' optional comments were read. Target domains were noted to identify broader conceptual keys for enhancing SHPA literacy instruction. Four hours were spent disseminating K-2 survey data. Thus, a decision was made to limit the action study's data analysis to grades K-2 only. Furthermore, instructional adjustments would likely be recommended by one or two grade levels at a time. Therefore, it also made logistical sense to limit the action research project's data analysis to the primary grades.

The qualitative data resulting from the K-2 participants' comments were categorized and coded into the five emerging categories, supported by quantitative survey statistics.

1. K-2 classroom teachers want to provide more explicit phonics instruction.

Figure 1

SHPA K-2 Teachers Who Favor More Structured Phonics

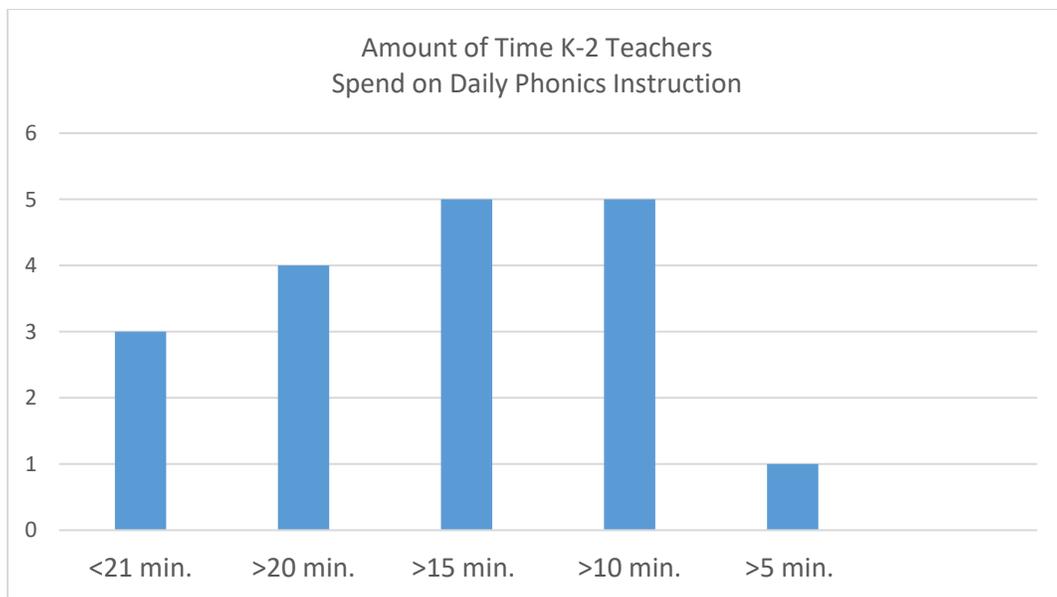


Note. Figure 1 data was derived from comments shared in the open-ended space included with survey question 14-- which ideas or methods are you interested in using to teach spelling and vocabulary strategies?

Only five teachers provided qualitative comments to question 14. However, all five K-2 teachers that responded advised they desired more structured phonics. The remaining 13 did not offer any comments. These statistics would make one wonder if SHPA teachers were not aware of the overwhelming research supporting more explicit, systematic phonics instruction or whether they were not interested in updating any literacy curriculum requirements.

Figure 2

Amount of Time SHPA K-2 Teachers Spend on Daily Phonics Instruction



Note. Figure 2 data was compiled from survey question 16- when you teach students how to read, how many minutes per day do you spend on phonics instruction?

The data confirmed that SHPA K-2 teachers do not spend adequate instructional time providing basic foundational literacy skills. Remarkably, one K-2 teacher spent less than five minutes/day on phonics instruction!

Table 2

Frequency K-2 SHPA Teachers Provide Decoding Instruction

Grade Level	Responses	Teaching Frequency
Kindergarten	83%	Daily or almost daily
1 st Grade	100%	1x – 2x/week
2 nd Grade	67%	1x – 2x/week
2 nd Grade	33%	1x – 2x/month

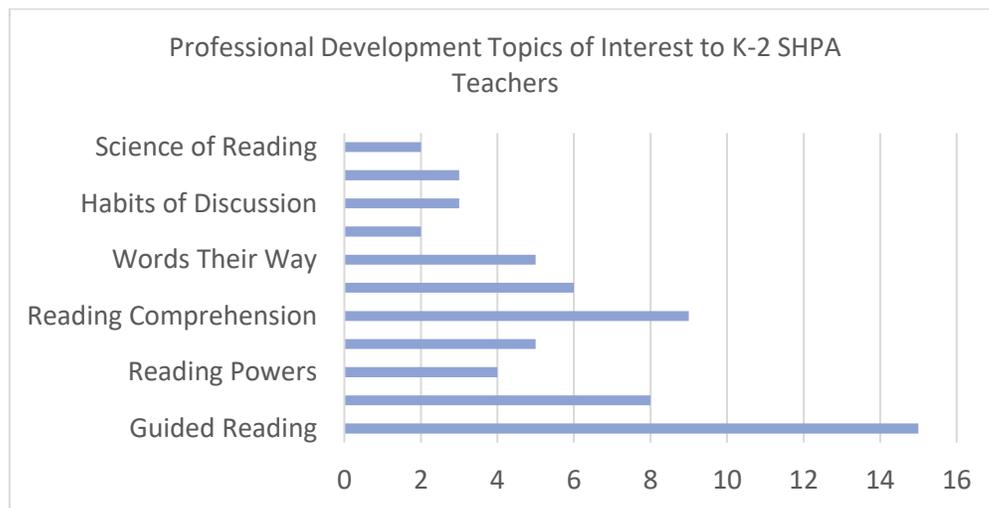
Note. Table 2 information was compiled from survey question 17c—how often do you teach students strategies for decoding words/sounds?

Table 2’s statistics indicated students received strong, consistent phonics and decoding instruction in kindergarten, but emphasis waned by second grade. This might account for one reason SPED referrals for specific learning disabilities increased at Seven Hills within the second-grade level in 2020-2022.

- 2. K-2 classroom teachers desire more structure regarding their literacy blocks.

Figure 3

Professional Development Topics of Interest to K-2 SHPA Teachers



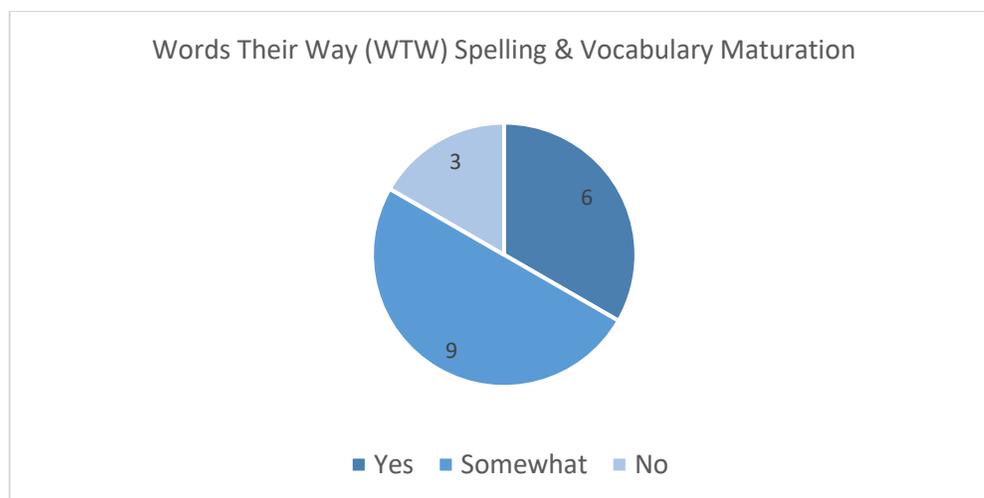
Note. Figure 3 data was derived from survey question five—what areas are you seeking more literacy PD?

Survey answers overwhelmingly indicated confusion and frustration regarding guided reading practices and organization since 15 out of 18 teachers advised they desired professional development regarding the topic. Reading comprehension and phonics topics followed second and third place for the next literacy-related training needs.

3. K-2 teachers reflected mixed feelings about the efficacy of utilizing the Words Their Way program in grades K-2 at SHPA.

Figure 4

Words Their Way (WTW) Spelling & Vocabulary Maturation



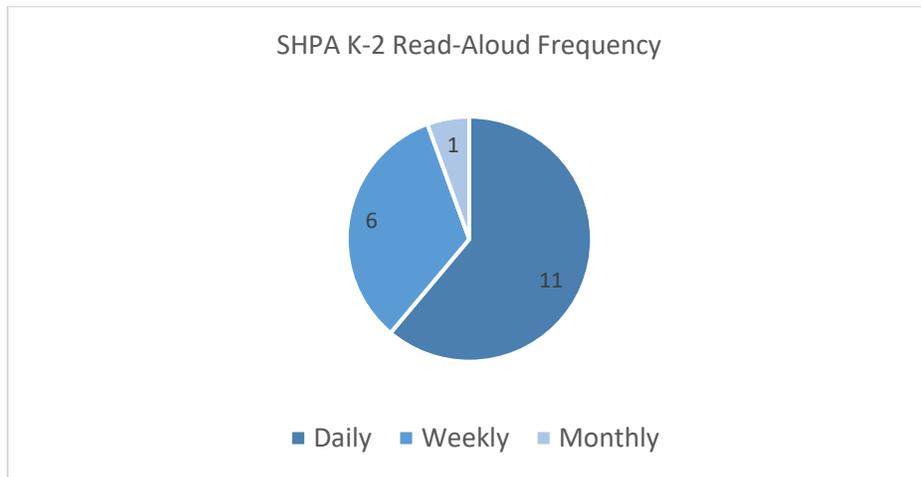
Note. Figure 4 data was derived from survey question 12—do you feel WTW helps students' spelling and vocabulary skills mature?

The quantitative data compiled from survey question 12 indicated half of the surveyed K-2 SHPA teachers did not feel that Words Their Way phonics and spelling instruction helped primary students' spelling and vocabulary skills mature.

4. K-2 classroom teachers should place greater emphasis on read-alouds and oral reading comprehension skills to build students' content, academic knowledge, and background.

Figure 5

SHPA K-2 Read-Aloud Frequency



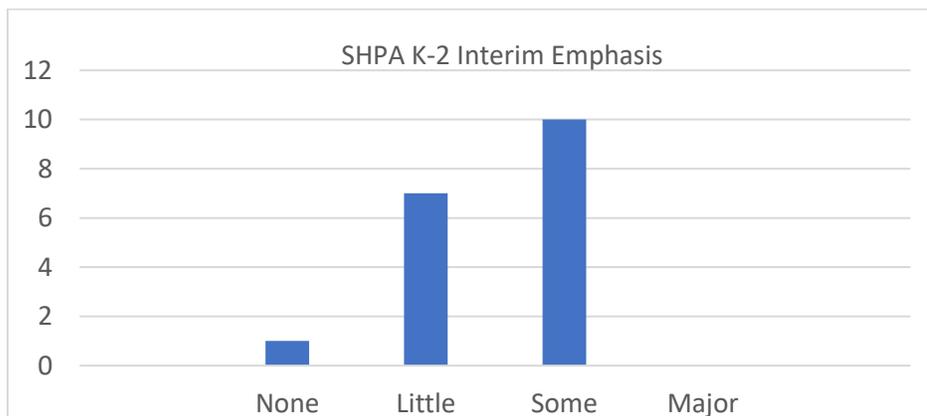
Note. Figure 5 data was compiled from survey question nine—how often do you read aloud to your students?

The data reassured that most K-2 classroom teachers read aloud to learners daily. However, it was concerning that one teacher read aloud once a month when SHPA’s literacy instructional requirements mandate daily and weekly shared reading experiences.

- 5. K-2 classroom teachers placed minimal emphasis on interims, which indicated teachers did not likely provide or prioritize data-driven instruction.

Figure 6

SHPA K-2 Interim Emphasis



Note. Figure 6 data was compiled from survey question 23—how much emphasis do you place on interim tests to monitor and measure students’ reading growth?

At the time of the survey, 44% of K-2 teachers advised they put little or no focus on interim testing, and per Figure 6, only half of the K-2 teachers surveyed placed some emphasis on interim testing.

Overall, the survey data comprehensively analyzed Seven Hills’ K-2 classroom teachers’ perspectives and instructional practices. The findings indicated numerous adjustments would elevate literacy instructional practices at Seven Hills to align more rigorously with current research surrounding the science of reading and language acquisition.

Discussion

Summary of Major Findings

Seven Hills’ literacy specialists collectively evaluated the survey responses to determine if school-wide or grade-level changes were desired or should be implemented to maintain robust literacy instruction for all students at SHPA. They assessed the structures, value, and presumed changes for literacy instructional practices, efficacy, teacher effectiveness, and student achievement utilizing a mixed-method approach including quantitative and qualitative data.

Prioritize Systematic, Explicit Phonics Instruction Among Primary Scholars

First and foremost, the study’s results suggest that a K-2 literacy philosophical shift is warranted and justified at Seven Hills Preparatory Academy. Educators believe more emphasis needs to be placed on explicit, systematic phonics instruction among K-2 learners at Seven Hills. Historically, SHPA’s administration has provided teachers much autonomy, but according to the survey, teachers desire more structure related to literacy instruction.

Numerous researchers have proven that prioritizing explicit phonics instruction in the earliest stages of learning to read will allow learners to concentrate on their reading comprehension skills as

they advance. As demonstrated in the literature review, multiple literacy researchers, specialists, and advocates worldwide support explicit phonics instruction in the primary grades before introducing comprehension strategies (Buckingham, 2020; Castles et al., 2018; Heller, 2022). Therefore, it is recommended that the Seven Hills administration, the literacy specialist team, and the curriculum committee re-evaluate the school's literacy philosophy, curriculum emphases, and instructional practices to ensure they align with evidence-based research that supports an ideal literacy and learning environment for students of multi-abilities and cultures. "Alone systematic phonics is not a foolproof guarantee of reading success; its effectiveness is mediated by the quality of the rest of the literacy program" (Buckingham, 2020, p. 106).

Replace Words Their Way [WTW] With a More Explicit Phonics Curriculum

SHPA educators do not believe Words Their Way (WTW) helps their K-2 students' foundational literacy skills improve or mature. Therefore, it is recommended that SHPA replace Words Their Way in grades K-2 with more explicit, potent phonics instruction. Survey data showed that over 60% of K-2 teachers spend 15 minutes or less on daily phonics instruction. And of those, 30% spend less than 10 minutes a day providing explicit phonics instruction. Yet, a plethora of research attests strong readers must possess solid phonemic awareness and phonetic skills to read fluently and with deep comprehension as they tackle more complex passages (Buckingham, 2020; Castles et al., 2018; Heller, 2022).

The proceeding qualitative survey comments further reflect educators' desire for more appropriate resources to teach emergent readers in grades K-2 with a greater emphasis on phonemic awareness and phonics skills. Two different kindergarten teachers commented:

- "I think we need a good phonics program for the younger readers."
- "I think phonics programs are important to have and teach not only at the K level but at 1-2, as well. The skills are key to becoming a strong reader in the upper grades, and in my

opinion, we need a program that K-2 uses to teach phonics. The lesson could be shorter for older [students], but I think teaching phonics skills are important, and we need a curriculum to support this.”

Additionally, two separate second-grade teachers advised:

- “I want a structured phonics time. WTW [Words Their Way] is great, but I don’t always feel that students understand why words are written the way they are and don’t always transfer those skills to their independent reading.”
- “I would love a more structured phonics and spelling routine. I have seen Sunday [phonics Tier 3 intervention curriculum/program at SHPA] a little, and I think it would be beneficial to implement in K-2.”

Increase Read-Aloud Emphasis

The K-2 survey responses disclosed that K-2 classroom teachers do not read aloud to their students daily. Only 11 out of 18 primary teachers responded that they read aloud daily to their students, equating to 61%. This finding surprised the research team since they thought most K-2 teachers read aloud to their students at least once a day, if not more.

Historically, read-alouds have narrowly been used to encourage children to enjoy reading, but read-alouds can also provide much more instructional umph! Professional development (PD) opportunities should increase teachers’ understanding of children’s books and their many unique teachable opportunities. Ideally, PD should concentrate on how teachers might maximize creative approaches utilizing children’s literature to expand phonemic awareness and build phonics knowledge among K-2 emergent readers, but also show how to extend read-alouds to reinforce numerous K-2 state and national learning standards (Akins, 2018; Campbell, 2021).

Maximize Data to Inform Literacy Instruction

The survey results divulged that SHPA K-2 classroom teachers place minimal emphasis on interims. This result was opposite to expectations since SHPA administration and the school's peer coaching model persistently emphasize the need and expectation for data-driven instruction. Seven Hills K-2 teachers do not use summative interim data to drive instructional literacy practices.

Data utilization can either open or close doors for students. Datnow & Park (2018) warn educators must be mindful of data practices that marginalize specific populations of learners. "Studying data through an equity lens provides unique affordances that can help eliminate problematic practices and promote better schooling for all" (p. 149). Educators must exercise caution so they do not unfairly segment minority and low-income learners. After all, the term 'achievement gap' is caused by unequal educational conditions and processes (2018).

Tensions exist between accountability-driven data and data use for continuous improvement. Therefore, teachers must collect and analyze multiple forms of data to capture a holistic summary of student achievement and growth. Instruction must remain well-informed (Datnow & Park, 2018). Thus, teaching educators how to collect and capitalize data is essential. Datnow & Park outline four instructional situations educators and leaders should always maximize data, including identifying problems, creating action plans, instructional improvement, and developing a collaborative culture of inquiry.

Various assessments are needed to measure every student's literacy skills. Unfortunately, a one-size-fits-all-assessment is not available to measure word recognition, listening comprehension, or reading comprehension. The Language and Reading Research Consortium (2015) recommends learners in grades 1-2 focus on accuracy assessments since their reading is slow and more error-prone. They recommend that grade 3 students be assessed based on word reading fluency. Moreover, they suggest

that word recognition and reading comprehension be disregarded since students' comprehension levels will dramatically change throughout their schooling.

Educators should not solely depend on benchmark assessments to place students in ability or reading groups (Datnow & Park, 2018). However, if benchmark data is used to organize students into ability groups, data should be reviewed quarterly to ensure educators are not limiting student opportunities. Stakeholders should seek alternative options to group students while being mindful that all students must consistently encounter close learning with certified teachers, rather than those moments being reserved for just high or low learners (2018).

Overall, a framework for teachers' data-informed instruction is necessary. Numerous formative and summative assessment tools provide teachers with quantitative and qualitative data. Educators should collaborate to standardize which data tools are appropriate for each literacy stage. Schools may purchase commercial products, use free online software, or create their own digital methods to promote data-informed instruction (Sun et al., 2016). Above all else, educators need to utilize data remembering that its purpose is to improve literacy instruction for all students.

Utilize Literacy Specialists as Instructional Coaches

Experts agree that teachers need targeted, ongoing training and hands-on opportunities to apply their learning under expert guidance to produce the most significant gains in teacher growth and student achievement (Hudson et al., 2021). Authentic professional development (PD) coupled with instructional coaching develops teachers' strong beliefs about literacy development and pedagogy, leading to increased academic achievement among all students and helping close achievement gaps (Emery et al., 2020; Kelly et al., 2019; Smith et al., 2020). Tremendous potential exists when literacy coaches collaborate with teachers to help them choose and implement research-based strategies, methods, interventions, resources, and techniques to help students learn more effectively (Emery et al., 2020). Study after study proves to invest in embedded PD and instructional coaching will save schools

money, increase student achievement, and reduce teacher turnover when implemented with efficacy (Smith, 2020).

Jim Knight (2007), the founding father of academic instructional coaching, and Emery's (2020) group of researchers advise that embedded instructional coaching can impact teaching and learning in various ways. Potential gains include 1) improved test scores, 2) being an economical and sustainable source of PD, 3) supporting new and struggling teachers, 4) growing a collaborative culture, and 5) helping teachers become flexible and open to change (2020). Teachers matter more to student achievement than anything else. Therefore, steps must be implemented to ensure high-quality teachers instruct emergent readers daily.

In recent years at SHPA, the role of literacy specialists substantially shifted to a 100% focus on providing Tier 2 and 3 interventions among the lowest 25% of struggling readers rather than balancing their roles with embedded literacy professional learning and coaching. The paradigm shift became apparent during an RTI model review toward the end of the 2020-2021 school year. The examination revealed that SHPA literacy specialist roles shifted so dramatically that SHPA's RTI model became dramatically unbalanced and skewed. Thus, literacy specialist roles should be adapted to 1) align with a classic Response Teaching Intervention (RTI) model and 2) maximize efforts to update Seven Hills' K-2 literacy focus. If literacy specialists are no longer delivering 100% of Tier 2 and 3 interventions, literacy specialists would be more available to provide embedded professional development and literacy coaching to make this recommendation possible.

Other Professional Development (PD) Needs and Instructional Considerations

The way PD is presented can vitally impact teachers and student achievement. Thus, administrators and coaches must remain mindful of how PD is designed and delivered. Teachers are most apt to alter their instructional practices if they are provided with intentional, hands-on experiences that explicitly guide them in applying their foundational knowledge skills (Hudson et al., 2020). Of

course, peer or instructional coaching support is the most optimal way to meet this recommendation, but group PD sessions are frequently more practical and efficient. Therefore, leaders must maximize efforts to ensure that group PD sessions boost teacher knowledge and motivation to impact their literacy instructional strategies immediately.

Numerous experts and the action study surveyed participants assert that teacher knowledge of phonics skills and morphology is lacking and poses a critical gap in teaching students how to read and spell (Castles et al., 2019). Therefore, consistent professional development utilizing a blog or a Facebook group might be a practical method to offer phonics learning in small, manageable chunks that teachers can easily refer to if necessary. Additionally, research suggests coupling this PD with follow-up modeling or support from a literacy instructional coach. Hudson et al. (2020) evaluated one research study that justified providing one-and-done training is insufficient for teachers' training on word-level decoding. Teachers who received follow-up support achieved more significant academic gains with their students.

Finally, and arguably most importantly, educators must consider students' home learning environment, previous background knowledge and life experiences, and effective instructional methods that will produce the most robust results for every student (Hudson et al., 2020). Teachers must identify and remove systematic barriers that prevent them from implementing researched methods that might resolve critical problems. This includes choosing culturally relevant books, assessments, and other instructional materials representing the school's demographic population (Terry, 2021).

Multiple research-based adjustments are recommended to improve literacy instructional practices at SHPA. The compiled survey data reflects that SHPA K-2 teachers desire more structure and organization related to K-2 literacy instruction, which unquestionably aligns with current research. However, careful and collective considerations must be made to ensure SHPA adopts robust, evidence-based practices and a curriculum that aligns with recent research and utilizes student data in a culturally responsive manner. Additionally, literacy professional development opportunities should be prioritized

to offer teachers with evidence-based research and strategies that would help them maximize their literacy instructional endeavors within their classrooms. Finally, continuous research requires consistent professional development and reflection, thus the advantage of embedded instructional literacy coaching.

Limitations & Further Study

This action research study focused on maximizing literacy instruction in a small urban school, so the results can only be generalized analytically. It was not the aim of the study to identify broad characteristics specific to classical education or urban elementary schools. Instead, an in-depth description and analyses were promoted to enable Seven Hills' leadership direction in future planning and instructional endeavors that will maximize student literacy achievement.

Like most urban public charter schools, Seven Hills is a culturally diverse school. However, minimal research focused on assessing the depth of current culturally informed literacy instruction or providing more of it. Thus, future studies should prioritize analyses and research surrounding this crucial educational matter, especially given the racially charged feelings that have erupted over the past two years since George Floyd was murdered in downtown Minneapolis, Minnesota, in May of 2020.

Unfortunately, time and space limited the full utilization of the action research survey data collected from SHPA teachers in grades 3-5. Therefore, future action studies should explore themes and issues that may need to be resolved, impacting older Seven Hills elementary scholars.

Conclusion

Widespread research proves that explicit, systematic phonics instruction is crucial for creating strong, independent emergent readers in grades K-2. Teaching efficacy and student achievement will be enhanced throughout all K-5 grades if SoR instructional methods are employed that were mentioned throughout this action research plan.

The impact of this study enhanced Seven Hills' classroom teachers' confidence and efficacy in improving literacy instruction among their K-2 learners. Second, the study motivated SHPA leadership to explore more explicit, systematic phonics curricular resources in K-2 classrooms. Third, the study targeted Seven Hills' K-2 students with specialized learning needs to receive more phonics instruction from their homeroom classroom teachers, thereby allowing them more profound, meaningful connections within their classroom communities and lowering SPED referrals for students with special learning disabilities. Fourth, by empowering classroom teachers to provide more phonics instruction, SHPA literacy specialists can dedicate more time toward providing embedded professional development and literacy instructional coaching.

Provided the research literature and realities of daily literacy instruction, one may conclude that K-2 classroom teachers should concentrate the bulk of their literacy instruction on enhancing phonemic awareness and providing substantial phonics knowledge to ensure K-2 learners become potent, independent readers as they mature academically.

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