VOICES FROM THE FIELD



Impact of the Implementation of the Science of Reading Instruction and Policy on Emergent Bilingual/English Learner Literacy Programs and Teachers

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Table of Contents

05	Executive Summary	
08	Study Overview Need for the Study Context Definition of Terms	. 10
15	Research Questions, Literature Review, and Methods Research Questions Literature Review Methods	15 15
22	Findings Descriptive Findings Open-Ended Question Findings	
34	Conclusions	
36	Recommendations	
38	Appendix A	
39	References	
42	About the Authors, Publisher, and Related Readings	



Executive Summary

The number of students who enter U.S. schools speaking languages other than English is large and growing, and now comprises over 10% of all K-12 students, with some districts having as many as 92% of all students identified as English learners. Ensuring equitable access to curriculum and opportunities to learn for this population is both a legal obligation and an ethical responsibility. Legal mandates and extant research have established that students identified as English learners (EL)—alternatively labeled Emergent Bilinguals (EB) in this paper—are legally entitled to instruction that is tailored for their unique linguistic assets and needs. Few would argue that acquisition of language and literacy in one or more languages is the cornerstone of equal access and opportunity for academic success for all students and particularly for EB/EL students.

Improving language and literacy acquisition for all students, including EB/EL students, has become a significant priority over the past few years and has been led by an education reform movement commonly referred to as the Science of Reading (SoR). SoR's influence is ubiquitous in policy and practice in the teaching of reading in elementary schools across the U.S. A recent survey conducted by the Shanker Institute (2023) reported that 40 states now have legislation that mandates SoR. These policies are meant to improve the teaching of reading, at least in part, by increasing the emphasis on foundational skills: phonemic awareness, phonics, vocabulary, fluency, and comprehension. This survey found that 80% of these states (n=32) only mention EBs/ELs to specify that they should be also covered by the state directive, making no specific additions or modifications to their legislation related to EB/EL students. Further, 1 in 3 of these SoR states (n=13) made no mention of EBs/ELs at all. Once again, state education policy seems to have marginalized EB/EL students.

There is a need to understand how the SoR policies across the U.S. are impacting instruction for EB/ELs. This study reports how these policies are implemented in a variety of contexts, including bilingual and English-only classrooms, across a variety of geographies and by diverse teachers. The purpose of this study is to uplift the voices of teachers, literacy coaches, and other educators who work directly with EBs/ELs in schools impacted by state SoR mandates.

One overarching research question guided this study: How has the implementation of the state initiatives related to the SoR impacted the ability of teachers to implement comprehensive reading programs for EB/ELs:

- In bilingual/biliterate/dual language programs?
- In English-instructed (English-medium) programs?

To address the above question, researchers interviewed 77 educators across the U.S. using semistructured interview methods. The interview protocol consisted of constructed responses and open-ended questions in each section, including:

- Questions about the participant's current work context, their position, number of years in the position, grade level, and language program (bilingual or English-medium);
- Questions about mandated programs or approaches to reading and literacy instruction; and
- Questions about instruction and implementation of SoR and modification (if any) for EBs/ELs.

Interview transcripts were recorded, coded, and analyzed for themes using an inductive analytic framework. Roughly 53% of respondents were classroom teachers and 47% worked as support staff, whose roles included directors, coaches, interventionists, and specialists both within schools and overseeing entire districts. Respondents represented 21 states spanning the range from those with large numbers and percentages of EB/ELs Learners (e.g., California, Texas) to states with very low numbers and percentages (e.g., Arkansas, Vermont). Geographically, respondents were evenly distributed across the country, with 26% from the Midwest, 24% from the West, 20% from the Northeast, and 27% from the South. Respondents also represented a range of educational roles, with 33 (53%) interviewees identifying as teachers working directly with students and 29 (47%) working in other support roles such as coordinators, coaches, interventionists, directors, and specialists. Respondents reported working in a variety of language program contexts, with 38% working exclusively in bilingual/biliterate/dual language contexts, 41% in English Language Development/English as a Second Language (ELD/ESL) contexts, and 21% in mixed contexts working in both bilingual/biliterate/dual language as well as ELD/ESL settings.

Seven major findings emerged from the data. These included:

- Teachers understand the importance of teaching foundational skills, including phonics, and appreciate that there are efforts to improve instruction of this literacy component. There is no resistance to teaching phonics and other foundational skills.
- In many instances English foundational skills have replaced providing English language development instruction to ELs. In other words, students are receiving extra doses of phonics at the expense of needed comprehensive oral language development in English. Teachers considered this encroachment to be a reduced opportunity to learn for EB/EL students.
- In many schools in which participants teach, robust literacy programs have been reduced to an almost exclusive focus on foundational skills. Teachers report mandates that include long blocks of time for literacy instruction with a focus on foundational skills, but rarely opportunities for children to read books.
- Implementation of dual language programs has been compromised and threatened. The focus on foundational skill teaching has included an interpretation that foundational skills should be taught and emphasized in English even if that disrupts literacy teaching and learning in non-English languages.

- Access to the full curriculum for all students has been reduced. Teaching social studies and science has been reduced or eliminated in the majority of classrooms in the study as a result of increased time devoted to foundational literacy skills.
- Teachers report negative impacts on their practice, but in some cases, they exert agency by refusing to give up previous practices that they found beneficial for students. Teachers reported that they have been told to focus on phonics and decoding, and little else. However, they report continuing to do read-alouds, teach writing and oral language, and use culturally responsive pedagogy.
- Some literacy programs lack culturally inclusive and relevant content and many teachers reported that their materials presented biased and ethnocentric perspectives.

Findings from the study raise grave concerns regarding how state mandated SoR directives are impacting teachers and EB/EL students in schools across the U.S. As currently being implemented, it It is evident that the linguistic and cultural strengths of EB/EL students are not being honored or activated in SoR mandates that are narrowly focused on foundational skills teaching with an emphasis on English.

Study Overview

Need for the Study

"There is no equality of treatment merely by providing students with the same facilities, textbooks, teachers and curriculum.... for students who do not understand English are effectively foreclosed from any meaningful education." (Lau v Nichols, 1974)

In school year 2021-22, there were about 5.3 million students in U.S. schools designated as English learners (ELs), comprising about 10% of the entire K-12 population. (National Center for Education Statistics, 2024). Since the most recent data were published, schools have reported even greater numbers of new arrivals, including many from Central America, Afghanistan, Ukraine, and many other regions. Ensuring equitable access to curriculum and opportunities to learn for this large and growing population is both a legal obligation and an ethical responsibility. Few would argue that acquisition of language and literacy in one or more languages is the cornerstone of access and opportunity for all students, and especially those students identified as ELs (alternatively labeled as Emergent Bilinguals in this paper) and who are protected under the Lau v Nichols Supreme Court case cited above. Improving educational opportunities and access for EB/EL students to equitable instruction has been a deep and abiding concern for educators who have long known that mainstream educational policies have never been equal.

Along with the concern about access and equity for EB/EL students, the past decade has witnessed the positing of a narrative that the U.S. is suffering from a national literacy crisis for all children that is caused by the methods used to teach reading. This narrative argues that methods used to teach reading have been ineffective, and drastic changes to policy and practice are needed. This narrative was generated, and has been led by, individuals and organizations identifying with the Science of Reading (SoR). The SoR movement has been both influential and widespread, as evidenced in a 2023 study by Neuman, Quintero, and Reist of the Shanker Institute, which found that 40 states now have some type of SoR legislation meant to improve the teaching of reading, at least in part, by increasing the emphasis on foundational skills teaching (Neuman, Quintero & Reist, 2023).

The concerns that EL/EB educators have about the movement is reflected in the fact that the Shanker Institute survey found that 80% of the states with such policies (n=32) only mention EBs/ELs to specify that they should be also covered by the state directive, making no specific directives about them, and 1 in 3 of these SoR states (n=13) made no mention of EBs/ELs at all. It may be argued that once again, state and national education policy have marginalized EB/EL students. Past school reform efforts, such as Reading First in the 2000s, demonstrated that translating knowledge about (bi)literacy development for EBs/ELs into practice poses a formidable challenge; even more so in states with English-centric laws and approaches. It appears that neither the legal basis for equitable treatment for EB/ELs nor the ethical responsibility for providing equal access has been considered in many of the state mandates. This leaves individual teachers and schools on their own to figure out how to best serve EB/ELs in initial literacy programs whether they are instructed in biliteracy/dual language or English-only contexts.

It is noteworthy that new SoR bills expanded on previous legislation. For example, while previous legislation was largely targeted at K-3 in Title I schools the new SoR bills are designed to affect instruction in all schools regardless of income status or performance—including charter schools. New laws in 32 states target students beyond 3rd grade. Preschoolers are included in legislation in 31 states. Further, 25 states have mandates for pre-service teacher professional development, 32 states have in-service requirements for teachers, and 17 have requirements for professional development for principals and other leaders. Of great import, 35 out of 40 states have mandated assessment to ensure that schools are implementing the state requirements, and every state bill requires local districts to adopt a systematic, rigorous and evidence-based approach to reading instruction generally supporting the five pillars.

However, it is of great concern that many of these state mandates do not align to current research. Much of the legislation in 40 states identifies the SoR to include five pillars from the National Reading Panel Report. Since then, a substantial amount of evidence has accumulated to suggest that other skills are critically important to improve reading proficiency, including:

- The now established link between oral vocabulary and word reading such that children who are taught the spoken form of novel words before encountering them in print read them more easily (Wegner, Beyersmann, Wang, H.C. & Castles, 2022).
- There is a substantial body of evidence to suggest that instruction in writing impacts reading fluency and comprehension (Graham, 2018).
- There is new knowledge that establishes that literacy is a social process. Studies have shown that culturally and linguistically responsive interventions contribute to substantial gains for children who speak a language other than English and/or whose families identify with a minoritized ethnicity or cultural heritage (Cycyk, DeAnda, Moore & Huerta, 2021; Cycyk, & Hammer, 2020).
- There are studies that have reported on the importance of developing background knowledge for improving vocabulary, concepts and comprehension (Neuman, Samudra & Danielson, 2021).

• There are studies that establish the importance of engagement and motivation in learning to read and in academic achievement related to reading (Cummins, 2011, 2012).

In short, there is now recognition for the need for legislation that espouses a holistic view of reading that is much broader in breadth and depth than that which was known and synthesized in 2000.

If we want to truly understand how state reading policies that are based on SoR are impacting schools and programs with EB/ELs, we must understand how they are being implemented in the contexts closest to the children: and these schools and classrooms. The purpose of this study is to uplift the voices of teachers, literacy coaches, and other educators who work directly with EBs/ELs in multiple contexts across the country to ascertain how they are interpreting and implementing various SoR-based state policies. This study gathered the testimonios of 77 teachers across 21 states to examine how SoR policy is being translated by districts and classrooms. It also documents the opportunities and challenges of applying SoR policies, which are primarily monolingual English focused, into schools and classrooms for EB/EL students.

Specifically, the testimonios in this research are not only first-person accounts but reflect a larger sense of a methodology lifting up the experiences of marginalized communities, particularly in relation to oppression, resistance, and resilience (Huber, 2009). The term testimonio is used in educational studies related to Latinx and Indigenous people to describe a narration marked by urgency to make public a situation of oppression or injustice as well as of resistance against that same condition. We set out to explore whether current state directed SoR policies created contexts of injustice or equity by exploring how teachers, coaches, and others were interpreting and implementing state SoR directives. By identifying an injustice, one can set in place the policies, means, and methods to address said injustices.

Context

For almost 10 years, U.S. education systems have been rushing to find solutions to the country's perceived reading crisis, with SoR mandates constituting the most popular response at the state level. As evidenced in the introduction, given that (a) in a relatively short period of time (2019-present) SoR legislation has been passed in 80% of states (Shanker Institute, 2023), (b) this legislation is mandatory, not optional, in all of the states, and (c) significant financial resources have been allocated, it is safe to say that the SoR movement has momentum, money, and power. Research by the National Committee for Effective Literacy (2023) has argued that the movement has caused particular challenges for EB/EL students. These include insufficient attention to:

- EB/EL students, who are included in laws in only 10 of 40 states
- Oral language and writing alongside the "five pillars" of reading 1

¹ The five pillars are: Phonemic Awareness, the ability to hear, identify and manipulate sounds in words; Phonics, the use of spelling patterns and sound-letter correspondence in words to decode; Fluency, the rapid, accurate, and expressive oral reading of words and texts; Vocabulary, the knowledge of word meanings; and Comprehension, understanding and interpreting the meaning of texts (National Reading Panel, 2000)

- Background knowledge and culturally responsive pedagogy
- Alignment and coherence across aspects of reading instruction, suggesting an insufficient focus on how various components of the system interact
- Guidance on how to move from policy to practice
- Family and community engagement, critical for making home/school connections to build literacy practices across the community
- Even with the plethora of state SoR mandates, it is clear that many of these mandates are limited in scope and lack focus on EB/EL needs.
- Even SoR advocates have expressed concerns that many of these policies misinterpret SoR tenets and research. For example, proponents claim that the SoR is not, in fact, focused primarily on teaching foundational skills, is not solely focused on phonics, and is not even an instructional program per se, and is not a one-size-fits-all program (Lawson, n.d.). These positions notwithstanding, state policies en masse have given more attention to the five pillars identified by the National Reading Panel than other important components of learning to read. These missing and overlooked components are the most detrimental for EB/EL students. Moreover, the National Reading Panel explicitly stated that they did not consider English learners in their findings and/or research related to the development of bilingualism or biliteracy (National Reading Panel, 2000).

In 2023, a joint statement was created by SoR experts together with experts in the field of Dual Language/Bilingual/ESL education for the express purpose of identifying areas of convergence as well as areas that were specific to EB/EL children. The statement titled, <u>Understanding the Difference: The Science of Reading and Implementation for English Learners/Emergent Bilinguals (ELs/EBs)</u>, was intended to clarify concerns related to the SoR and the teaching of EBs/ELs (Understanding the Difference, n.d.). The joint statement is noteworthy, but it is unclear how administrators and teachers in schools and classrooms across the U.S. are taking up its findings since this statement was developed after the passage of the majority of state SoR directives.

Moreover, years of educational research have documented the gaps between research, policy, and practice. As new SoR mandates are implemented, it is critical to understand how they are being taken up and applied by those most affected by these sweeping policy changes.

Reading researchers Seidenberg, Brokenhaven and Kearns (2020) have called the disconnect between research, policy, and practice "Lost in Translation," and have cited a need for additional translational research linking reading science to classroom activities to avoid the oversimplified way that the science is sometimes represented in the educational context. Tierney and Pearson (2024) have called for specific attention in this area to the "Science of Implementation" to create and study methods of ensuring successful transitions from policy and research to practice in educational settings.

Implementation science is the scientific study of methods and strategies that facilitate the uptake of evidence-based practice and research into regular use of practitioners and policymakers. The field of implementation science seeks to systematically close the gap between what we know and what we do (often referred to as the know-do gap) by identifying and addressing the barriers that slow or halt the uptake of interventions (Blase, Fixsen, Sims, Ward, 2015). The science of implementation research is important for many disciplines including medicine and education. Interventions and innovations that are poorly implemented or not implemented at all may not produce expected benefits (such as health benefits or academic outcomes in schools) resulting in an inability to conclude whether the intervention or practice was poorly implemented or implemented without fidelity or never effective in the first place.

In education, implementation science is a method that concentrates on how proposed instructional changes are carried out to ensure that the implementation process accounts for local variables in schools and other relevant contextual factors to be successful in any setting, and to ensure that any outcomes can be validly attributed to the intervention and not to other factors.

The above context provides a backdrop for sweeping changes that many states are requiring from their schools and teachers. Unfortunately, as with many of these educational mandates, the voices of educators and families are sadly absent when they should be integral to the legislative process shaping reading instruction for all children and especially for the specially designed educational programs for EL/EB students. A collaborative approach is likely to result in stronger implementation of any innovation.

This paper is significant as it is one of the first efforts, nationally, to document how the current SoR state mandates are being interpreted, taken up, and challenged by the stakeholders most affected by them – teachers of EB/EL students, whether they are in dual language immersion, biliteracy, or English instructed programs. These mandates, many of which are narrow in scope, have once again marginalized EB/EL students and provide little support in how to move from policy to practice.

Definition of Terms

Terminology for students

There are multiple terms used throughout the nation to refer to students who enroll in schools with a family language other than English, who are not English proficient, and who face barriers to equal educational opportunity related to attending schools that are still predominantly and overwhelmingly taught only in English.

- English Learner (EL) is the legal term used in federal legislation for students in K–12 education who have a home language other than English and who do not yet have sufficient proficiency to participate in an academic program in English without supports. It also reflects a particular history of barriers to equal educational opportunity exposed by civil rights advocates. The attention to issues of access implied by that term and its history is essential; however, the term is inadequate to embrace an assets-based approach to bilingualism with an equal focus on the value and goal of attaining proficiency in multiple languages. The field of EL education is now navigating to more accurate and assets-oriented terms that:
 - (1) avoid the deficit view that labels students only in terms of the language they do not yet know, and instead acknowledges the fact that these students enroll in school already with a language;
 - (2) recognize the process of language and literacy development is a dual language process involving both the home language and the additional language regardless of whether students are being instructed only in English or bilingually; and
 - (3) respond to the fact that increasing numbers of schools and districts have the goal of developing biliteracy and proficiency in multiple languages. These terms include "dual language learners" (preferred by many in the early childhood education field), "multilingual learners," "emergent bilinguals," and "bilingual learners."

This paper uses the combined terms:

• Emergent Bilingual/English Learner (EB/EL) to refer to all students who enroll in school with a home language other than English and who have been determined to not yet be proficient in English.

Terminology for program and instructional approaches

Similarly, there are multiple terms used to refer to the language acquisition/development programs for these students. For this reason, clarification of terms is as follows:

- Bilingual programs is an umbrella term for a variety of bilingual approaches that teach two languages and that instruct content in two languages. There are various models of bilingual programs, including two-way dual language immersion programs, maintenance/developmental bilingual programs, transitional bilingual programs, and heritage language programs. All share the goals of biliteracy, mastery of grade-level content in two languages, and cross-cultural competence.
- English-instructed programs: English language development programs (which may also be called English for speakers of other languages (ESOL) or English as a second language (ESL) are one component of English-instructed programs, as these elements support English language proficiency within the context of general education programs that provide language support to EB/ELs in grade-level classrooms.
- Mainstream English programs: Programs where English is the only medium of instruction.
- Comprehensive (Bi)Literacy programs: A comprehensive approach to literacy instruction involving 24 elements in four categories (Olsen, 2022). The first category includes the six precursors to literacy important to establish among young children (preschool/transitional kindergarten age). The second category includes twelve essential elements of literacy instruction. The third category attends to the six essential contexts of literacy development that facilitate and enhance literacy development: the location of literacy development within content learning in integrated thematic units, the creation of a language-rich and print-immersive learning environments, the use of high quality and culturally inclusive materials, safe and assets-based relationships, and support for the development of home language and bilingualism. And the fourth category speaks to additional elements of literacy development specifically for bilingual and dual language program contexts where the goal is biliteracy and the uses of literacy for academic study in two languages (Olsen, 2022).

Research Questions, Literature Review, and Methods

Research Questions

To examine how SoR state policies are impacting schools, particularly the implementation of literacy programs for EBs/ELs, this paper conducted interviews with 77 educators across the U.S., asking both constructed response and open-ended questions. We were especially interested in whether teachers feel prepared to implement SoR state mandates and how these new mandates align or conflict with existing curricula. We also probed for how SoR instruction impacts programs designed especially for EBs/ELs, including designated ELD and native language literacy and content instruction that are taught in a non-English language.

One overarching research question guided this study: How has the implementation of the new state initiatives related to the SoR impacted the ability of teachers to implement comprehensive reading programs for EB/ELs?

- In Bilingual/Biliterate / Dual Language programs?
- In English instructed (English medium) programs?

Literature Review

Before SoR, U.S. schools were influenced in the 1950s by a movement influenced by Rudolph Flesch, who wrote a book titled, *Why Johnny Can't Read*. Flesch argued that the reason that Johnny couldn't read was that he didn't know phonics (Flesch, 1955). Over the decades, the question of how much time and attention should be devoted to teaching phonics and other foundational skills within school literacy programs has been hotly and laboriously debated. In 2000, the National Reading Panel released findings of a synthesis of research that concluded that effective reading programs need to include five foundational skills: phonemic awareness, phonics, vocabulary, fluency, and comprehension (National Reading Panel, 2000). It is important to note that neither the National Reading Panel nor the Reading First research and subsequent programs were created for EB/ELs. In its introduction, the National Reading Panel (2000) said, "The panel did not address issues relevant to second language learning."

A \$6 billion program titled Reading First took the findings of the National Reading Panel Report and reading programs were created for US schools that were heavily focused on phonics and other foundational skills. Research results from Reading First were not positive. An extensive evaluation of the efficacy of Reading First was conducted by the Institute of Educational

Research (2008) to determine its impact on student reading achievement and classroom instruction. The report found that there was a significant impact on strengthening decoding skills among first-grade students.

However, Reading First did not produce a statistically significant impact on student reading comprehension test scores in grades 1, 2, or 3, and there was no substantial improvement in student motivation and engagement with literacy.

As established above, current state SoR mandates largely reflect the approaches set out in the findings of the National Reading Panel report. Although proponents of SoR have argued that beginning reading instruction should focus on teaching the five foundational skills of phonemic awareness, phonics, fluency, vocabulary, and comprehension, in reality not all five foundational skills have received the same amount of attention. As the results in this report demonstrate, phonemic awareness and phonics have received priority. While SoR proponents have also said that the five foundational skills are not the sole focus of programs to improve initial reading instruction, the majority of state mandates have chosen to almost exclusively focus on these five foundational skills. It is important to note that neither the National Reading Panel nor Reading First research and subsequent programs were created for EB/ELs. It is important to note that neither the National Reading Panel nor the Reading First research and subsequent programs were created for EB/ELs. In its introduction, the National Reading Panel (2000) said, "The panel did not address issues relevant to second language learning."

The National Literacy Panel for Language Minority Children and Youth (NLP) was later commissioned to fill the gaps for EB/ELs by adding research related to literacy development and English Learners. Findings from the NLP concluded that while foundational skills are important in initial literacy development, they are, in and of themselves, insufficient (August & Shanahan, 2006). The study went on to conclude that:

- EBs/ELs learn to decode at the same rate as their monolingual English peers, but they lag behind in comprehension and writing.
- Oral language serves as a foundation for literacy and is essential for EB/ELs who are learning to understand and speak English at the same time as they are learning to read and write.
- The use of the home language is beneficial to cross-language connections and the acquisition of literacy, an aspect unique to EBs/ELs that we have since come to term as metalinguistic development.
- The potential of dual language approaches needs to be further studied.

The NLP report has been reinforced in recent years by other large scale research studies such as the <u>Promoting the Educational Success of Children and Youth Learning English</u> Report from the National Academies of Sciences, Engineering and Medicine (2017), which supported the advantages of bilingual/dual language approaches in early childhood programs for EB/ELs while also emphasizing the importance of oral language development in English, and if at all possible, in children's non-English languages. This report is especially relevant to this review of literature

in that it found that many schools are not providing adequate instruction to EBs/ELs in acquiring English proficiency nor are they providing access to academic subjects at their grade level. Finally, the report provided one more piece of evidence that longer-term effects of language of instruction on EB/EL outcomes favors benefits for bilingual programs compared with English-only approaches.

Added to the above, a large multi-year national study on reading comprehension titled "Reaping the Rewards of the Reading Understanding Initiative" (Pearson, Palincsar, Biancarosa & Berman, 2020) reported, among many other findings, that language drives every facet of comprehension, and that reading is an inherently cultural activity. Further, its major findings included emphasizing the important role that oral language plays in reading comprehension, that early language skills likely serve as a foundation for proficient reading comprehension in the elementary grades, and that sophisticated forms of linguistic knowledge and skill are associated with reading comprehension in early adolescence.

Studies on comprehension in the early grades (K-2) might conclude that phonemic awareness tends to be the most important predictor of reading achievement. Conversely, more meaning-based language variables, including receptive and expressive vocabulary, are more predictive of comprehension as students move into grades 2 and 3. Critically important for EB/ELs, however, is the evidence that reading comprehension is affected by many language factors beyond vocabulary including grammatical skills, orthography, morphosyntactic, register, argument, and discourse (Pearson et al, 2020).

Moreover, there is a dearth of research on comprehension for EB/ELs such that Pearson et al. (2020) said that a priority for future research should be on EB/ELs, "a growing but still underserved population. The irony of this population is that, even though they bring rich language experiences to the classroom, we seem unable to exploit their first language or interlingual (first to second language connections) linguistic resources to craft effective programs for deep reading experiences in English as a second language. Developing curriculum, and for that matter assessments, that exploit their linguistic resources, brought into relief by increasingly prominent and deeper understanding of the role of translanguaging and interlingual expertise (the special knowledge that accrues to students who work in more than one language), represents a real opportunity for scholars of comprehension to embrace in order to better exploit the special resources of bi- and multilingual students" (p. 7).

Applying the research to an instructional framework, the Council of Great City Schools (2023) published "A Framework for Foundational Literacy Skills Instruction for ELs" illustrating the need for a literacy framework for English learners that includes, but is not limited to, current SoR policies and instructional frameworks. This is a more comprehensive approach that includes the five pillars and adds components critical to literacy acquisition for EB/ELs.

Finally, and perhaps most significantly for the purposes of centering social justice in school programs for EBs/ELs, SoR state policies have been criticized as being:

• Monocultural and entrenched in Anglocentrism and Eurocentrism

- Inattentive to issues of social justice
- Confined to an insular research agenda with limited relevance for a universal science of reading, "as needing to be reimagined to attend to linguistic, cultural and individual variation... to make it more robust and socially just"
- Neglecting to promote bilingualism and biliteracy, which has mostly been ignored in debates over English only and bilingual education (Aukerman & Schuldt, 2020; Tierney & Pearson, 2024; Share, 2021)

Of particular importance in this discussion is the emphasis in bilingual/biliteracy/dual language programs on culturally relevant pedagogy and the need to teach for social justice. Culturally relevant pedagogy is a theoretical model that focuses on multiple aspects of student achievement and supports students to uphold their cultural and academic identities. The model also calls for students to develop critical perspectives that challenge societal inequalities (Ladson-Billings, 2014).

Recent research (Tierney & Pearson, 2024) has argued for a total reset on the National Reading Panel given what we have learned since 2000 (as represented by research reviewed above) especially regarding EBs/ELs. Collectively, this review adds to the argument supporting the need for different policy and pedagogy for EBs/ELs, which stands in stark contrast to the SoR mandates in the majority of states.

The table on the next page contrasts the SoR instructional foci, which is dominating policy and practice in 40 states, with what is known about effective instruction for EBs/ELs in English-instructed and bilingual/dual language programs. It is a synthesized version of the work of Olsen (2023) and her model for comprehensive (bi)literacy instruction.

Table 1

Essential Components for Comprehensive (Bi)Literacy Instruction for Monolingual English Literacy Programs, for English-Medium Programs for ELs and Dual/Bilingual/Biliteracy Programs for EB/ELs

Comprehensive (Bi)Literacy Approach Elements	Native English Speakers in English Medium	EBs/ELs in English Medium	EBs/ELs in Bilingual/Dual Language
Oral language/Oracy	In a known language	In English as a new language	In non-English languageIn English as a new language
Foundational Reading Skills • phonemic awareness • phonics • vocabulary development • fluency • comprehension	In a known language	In English as a new language	 In non-English language In English as a new language
Writing	In a known language	In English as a new language	In non-English language In English as a new language
English Language Development		In English as a new language	In English as a new language
Metalinguistic Development		In a new language	 In non-English language In English as a new language
Cross-Language Connections		In a new language	Between a non-English language and English as a new language
Social Justice Teaching and Culturally Relevant Pedagogy	In a known language	In a new language	 In non-English language In English as a new language

The above review highlights the limitations that the heavy emphasis on SoR in current state mandates poses for EB/EL students.

When considering the elements of the comprehensive (bi)literacy approach, it is important to note that the research that underlies the SoR approach is predicated on the fact that native English speaking students are engaging in instruction that is provided to them in a known language. The task is doubled for EB/EL students, whether they are in English instructed or Biliteracy/Dual Language programs. In these contexts, children must learn oracy, foundational skills, writing, and metalinguistic development in an unfamiliar language as well as in a non-English language.

The above review highlights the limitations that the heavy emphasis on SoR in current state mandates poses for EB/EL students. Further, the review illustrates that there is ample evidence to support more comprehensive approaches to literacy instruction for EB/ELs.

This paper sought to examine what components of literacy instruction are being emphasized in schools and classrooms, and to what extent current policies, as enacted by schools, enable or prevent implementation of effective practices for EBs/ELs. Given the nearly ubiquitous presence of SoR policies in U.S. states and schools, it is imperative to understand both how such policies are communicated to teachers and schools as well as how they are being implemented in classroom practices.

Methods

The study drew on semi-structured interview methods using an interview protocol that was created in the fall of 2022 by a team of researchers across the United States who are involved in the field of bilingual and English Language Development (ELD) education. The interview protocol consisted of three sections with both constructed responses and open-ended questions in each section. The sections included:

- (1) Questions about the participant's current work context, including their position, number of years in the position, grade level, and language program (bilingual or English medium);
- (2) Questions about mandated programs or approaches to reading and literacy instruction; and
- (3) Questions about instruction, with additional questions for educators in dual language and bilingual contexts.

The study design was presented to participants at the La Cosecha National Dual Language Conference in 2022 and 2023, at the National Association for Bilingual Education Conference in 2023, at the California Association for Bilingual Education Conference in 2023, and at the WIDA Conference in 2023 with an invitation for educators to participate in the study via a remote interview.

These conferences were chosen because of their focus on educators of EB/EL students including those who work in Biliterate/Bilingual/Dual Language as well as English medium programs. A snowball sampling recruitment technique was also used in which research participants were asked to assist researchers in identifying other potential study participants who may not have had opportunities to attend national professional conferences. A total of 77 participants were interviewed for the study.

Interviewers used an interview protocol document (Google Survey) to read the interview scripts, record constructed response data, capture real-time notes about responses to open-ended questions, and upload audio recordings of interviews. The data captured in the Google Survey were used for descriptive summaries, to triangulate the interview transcripts, and to identify areas to expand the interview base. Audio recordings were transcribed using Otter.ai and analyzed using MAXQDA by the data analysis team. Recording transcripts were coded and analyzed for themes using an inductive analytic framework. Inductive analysis uses a bottom-up approach, meaning findings are generated from the data rather than from predetermined criteria, thereby enabling the research team to form generalizations from specific information provided by research study participants and other facts.

Findings

Descriptive Findings

A total of 77 interviews were conducted. Due to the sensitive nature of these conversations, varying contexts, and some interviewees' reluctance to share personally identifiable information, not all interviewees answered all survey questions, resulting in inconsistent total counts per descriptive statistic below. Nonetheless, these data reveal the diversity of roles, experiences, and contexts across the interviewee sample.

Respondents reported working in a variety of language program contexts. Those who work in other support roles often support more than one type of language program. Specifically, 26 (38%) identified their program as bilingual/biliteracy/dual language and 28 (41%) as English-medium, with 14 (21%) working in a mix of both. All of the dual language programs in which participants worked were in English and Spanish, and two respondents reported working at sites that also taught Mandarin and Korean.

Across the sample, the majority of respondents (88%) specified that students received designated English Language Development (ELD), although this question did not capture the nature of the ELD programming and so these responses could potentially include such diverse types of services such as push-in or co-teaching. The majority of respondents also said that their schools were expected to implement a specific adopted literacy program. Within these mandated literacy programs, 75% of respondents reported that their formal curriculum called out some literacy components as "more important" than others, with about half (45%) of all respondents saying that phonics (including phonemic awareness, decoding, alphabet, letter recognition, letter-sound correspondence, sounds, sound isolation, segmenting words, and syllables) are the most emphasized aspect of their program (see Table 1 in Appendix A for all response rates). These findings demonstrate that, despite representing a range of language programs, geographic areas, roles, and English learner contexts, the majority of participants are required to use mandated programs, a large proportion of which promote phonics at the expense of other literacy components.

Open-Ended Question Findings

Participant responses to the study's open-ended questions revealed patterns in participant *testimonios* that raise concerns about the overall impact of the implementation of SoR policies and initiatives across the country are having on teachers of EB/EL students whether they are in English instructed or Biliterate/Bilingual/Dual Language classrooms. The findings include

patterns about what teachers are being asked to teach, how they are being asked to teach it, and what curriculum and opportunities to learn are being sacrificed in the process of implementing new policies and programs that are solely focused on the SoR mandates.

The following trends in the testimonios speak to the overall environments and contexts in which these new mandates are being implemented. First, educators who talked with us overwhelmingly expressed concern about sharing their situations and experiences with us. Although we assured them at the onset that all interviews were strictly confidential and that no identifiable participant information would be reported, they still expressed concern that they could be reprimanded for speaking openly about what is going on with literacy instruction, especially for EBs/ELs. Furthermore, many respondents shared how the new mandates cause undue stress because teachers simply cannot fit everything they are being asked to do into the current school day, a through line in each finding presented below. Although the concern that there is not enough time in the school day to attend to everything is not new, what was new, and alarming, was that this finding was frequently reported to us amid tears - tears that included expressions of frustration, inadequacy, and stress at what they are being asked to do - and fear that they are harming rather than helping children. Few testimonios told stories of high morale, professional satisfaction, and feeling empowered as educators. Many participants told us that there were more educators who would like to talk to us, yet they were afraid. Others reported motivation to resist some of the most restrictive mandates. For the most part, they just wanted to be heard; they felt liberated to express themselves and believed that their voices mattered by participating in the study.

Finding #1: Teachers understand and are teaching foundational skills including phonics, and are grateful for more direction and materials to do it better; however, the amount of time they are now being directed to devote to it is problematic.

Across the sample, many educators (36%) reported how SoR elements positively impacted their curricula and instruction. A common theme was that teachers noted how these curricula provided background knowledge into language that enhanced all educators' ability to understand some language-related issues pertinent to their multilingual students. Teachers stated that they appreciated having systematic phonics programs that outlined approaches to teaching letter names and sounds. One teacher noted, "I think for some of those kids having that explicit instruction on the sounds, having the mirror to look at their mouth, that has been really good for them. They get to see how to pronounce, and then you can give them these options for, 'These are other ways that we can spell it. Sometimes you have to guess.' That part's a lot of fun." Because of the developmental nature of SoR, teachers especially in the early grades reported feeling like such programs were beneficial for their EB/EL students. However, even when describing the positive aspects of their program, teachers cautioned that there were challenges to accessing those benefits, such as overcoming a lack of support, resources, and training.

This finding is important for several reasons. First, it challenges the narrative that before the Science of Reading mandates, teachers did not teach phonics and other foundational skills and had been discouraged from doing so. Rather, these findings show that teachers were already practicing foundational skills instruction and eager to improve upon their current practices. Teachers interviewed acknowledged the need to have a well-defined foundational skills program, and they stated that they "did the best they could" prior to the new SoR policies, but often felt that they had inadequate materials and resources.

Despite the potential benefits of SoR, teachers consistently reported a very real concern that they were required to dedicate extraordinary amounts of class time to SoR-oriented instruction, often at the expense of language development for their EB/EL students and other content areas for all students. Teachers reported spending between 10-60 minutes each day on phonics depending on the grade level and literacy program. Teachers described their current time allocations as a departure from past practices, with one teacher saying, "Eight, 10 years ago it used to be, phonics was 15 minutes and you moved on. And now? 30 minutes or 45 minutes." The younger grades that are the target of the largest allocations of phonics time reported spending up to an hour each day on this work, with one teacher reporting, "In kindergarten, what we would consider their word recognition routine is approximately one hour. That one hour is broken up into 15 minutes of phonics, 15 minutes of alphabet knowledge, 15 minutes of alphabet enrichment, and then 15 minutes of decodable text and high frequency words." Although teachers frequently reported perceived benefits to SoR-based programs, they also lamented the heavy costs they entailed saying, "The amount of time that they give to not just teach the phonics lesson but everything else that comes with the English language arts block, there's just simply not enough time to do it. And it seems like every year they're adding something to it. But not time."

Finding #2: Teachers are being mandated to place an absolute priority on the scheduling of English foundational skills, particularly phonics, which has resulted in less available time to teach English Language Development (ELD) and/or English as a Second Language (ESL).

Because of the increased attention to foundational skills teaching, students are spending increasing amounts of time in their literacy blocks, which themselves are increasingly dominated by phonics. As a result there is less time in the remainder of the day for other activities. In order to compensate, some teachers reported sacrificing time from their English Language Development (ELD) blocks, which is specifically designated time during the school day to teach English to EB/EL students. It is not reading intervention or for the teaching of foundational skills intended for native English speaking students. Teachers reported that timing "impacts language development time because ELD is not always seen as important as phonics." Even when mandates are not necessarily the issue, the perceived pressure to emphasize phonics can influence teachers' choices: "We had a really nice ELD program that we developed, but now with this phonics being thrown in there... some teachers say, 'Oh, but my principal has said that I really have to do this phonics, so I don't have time to do all the other components of the ELD block." Even during protected ELD time, due to the pressure to emphasize phonics some teachers reported that, "They want our language development to just piggyback on the literacy work that's happening. They don't want it to be language development, they want it to be an extension of the language arts curriculum." Unfortunately, in the name of building foundational reading skills in the lower grades even the earliest readers are losing protected ELD time, with one teacher saying, "The English language instruction at K is whole group, mostly phonics focus with a little bit of reading aloud. The English language time is ELA. It's not language time, it's really reading time."

A second challenge reported by teachers was that the pacing in many of the program materials is too fast for EB/ELs, and too many concepts are introduced in one lesson for EB/EL students to follow and grasp. This is exacerbated by the fact that there is little time for review of the concepts, with teachers saying that they noticed others in their building "felt like they had to just keep pace with this curriculum and turn the page even if the kids weren't ready." This was reported to us by ESL/ELD teachers as well as bilingual/biliterate/dual language teachers.

Sadly, the focus on meeting the pacing guidelines of the curriculum instead of the needs of the students was also reported in schools supporting newly arrived students where "we're drilling the students on phonics concepts when they don't understand yet. They still had to follow the same district assessments… applied to the native English speakers. So, teachers had to move the students along."

Teacher testimonios as reported above, support the research reported by Tierney and Pearson (2024) that reaffirm that ELD should be a part of a core or Tier I instructional programs for EB/ELs, and should not be eliminated to provide for more phonics instruction. Findings from the research they reviewed indicate that there is evidence that acquiring word meanings through strategies used in current ELD programs enhances decoding. In short, children need to understand the words they are learning to decode. The implications from this are that ELD instruction that focuses on meaning making should remain protected time and not be replaced by more phonics and foundational skills.

Finding #3: Robust literacy programs have been reduced to an almost exclusive focus on foundational skills.

This prioritization of phonics within the literacy block not only results in the reduction of ELD time but also the reduction of quality instruction in the literacy block itself. In particular, teachers reported that the prioritization of phonics comes at the expense of other literacy components essential to multilingual learners' success such as comprehension, cross-language connections, oral language, writing, and – perhaps most unfortunate at all – authentic engagement with texts and development of a love of reading. These trends are also detrimental to monolingual English speakers, as all students benefit from strategies that are engaging and develop expressive skills such as writing and oracy (Cummins, 2011, 2012).

Teachers cite concerns that the overemphasis on discrete foundational skills and the focus on decoding and fluency in many of the SoR mandates and the programs used to teach them have created an overall absence of attention to comprehension. Teachers reported receiving messages like, "'Those kids need to learn how to read. They need to learn how to decode and they need to learn how to be a fluent reader.' No comprehension. Strictly phonics," leaving them with the impression that "if [comprehension is] in there, it's missed, because so much emphasis is given on phonemic awareness and phonics. I don't think that we're really asking kids to think about what they're reading or what they're listening to." This is of particular concern for teachers of EB/EL students, who have reported that in the upper elementary grades it is not unusual for such students to be quite adept at decoding and fluent reading but without the skills resulting in better reading comprehension (National Reading Panel, 2006). One teacher noted, "It's just teaching students how to decode and recode words. And that's great and all, but you want them to be able to be successful in the classroom. They can read. However, they don't understand what they're reading. That doesn't help them in the classroom." This outcome is perhaps not surprising, as the Survey of State Legislation published by the Shanker Institute (2023) found that only six of the 40 states with SoR mandates specifically mention comprehension even though it is one of the five foundational skills from the National Reading Panel.

Teachers also expressed concerns that phonics are frequently taught out of context, leaving EB/EL students clueless. In particular, teachers noted struggling with the use of nonsense words,

which are words that take the form of regular English words but are not real words, so that students may focus on form rather than meaning. Teachers report that such practices are "not really benefiting our kids in any way," and "useless." "We are wasting time doing that," one reported, as ELs may be trying to understand these words that they don't know are nonsense. Another teacher added, "I would eliminate nonsense words. I think it's absolutely ridiculous for emergent bilingual students to be engaged in nonsense words." Isolating skills instead of integrating them not only wastes time because it takes longer to teach, but it also eats into time needed to teach real vocabulary through oral language, writing, and building content knowledge and comprehension – all of which have already been shortened because of increased phonics time.

Only 66% of respondents reported that oral language development was included in their mandated literacy curriculum, with about 10% of respondents reporting that their curriculum de-emphasized oral language. This pivot away from oral language development was mirrored by a similar deemphasis on writing, with one teacher summarizing the situation as, "There tends to be more focus on decoding and those discrete skills than there is on oral language development and writing. Those are definitely lacking. And that may not necessarily be because it is explicitly that way in the resource per se, but I think that it tends to be what our educators fall back on. They do less oral language, they do less writing. They do a lot of those discrete skills, the decoding, the phonological awareness. I mean, for years we would only say, 'phonics.' We didn't even say 'foundational skills,' we just said 'phonics'." Writing in particular was noted as very limited. It's just like one sentence. There's no composition whatsoever." This de-emphasis is potentially due to the aforementioned time constraints, with one teacher describing the tension as, "We get about 20 minutes a day for writing. For phonics, we have 40 minutes a day."

Not only does the focus on phonics and isolated skills reduce time for comprehension, oral language, and writing, but sadly many teachers also reported that due to lack of time and a pressure to prioritize phonics they also sacrificed engagement with text and authentic enjoyment of reading. "I think that there's a lot of time spent on discrete skills, which takes away time from kids immersed in text, especially texts that they want to read."

Many teachers reported that they have a long literacy block but very few books and materials that promote reading books of choice for enjoyment. Typically, books used in packaged curricula--which may be the only books teachers are allowed to have in their classroom--are decodable books that prioritize the use of words with particular phonemic patterns rather than an engaging story. These books limit the quality of vocabulary the students are exposed to. Teachers reported reading time that includes a lot of reading off of slide decks in English but few books. SoR literacy programs include scripts for teachers that dictate how long to spend on each PowerPoint slide or each skill, but no time to engage children with the joy of reading or to talk about the meaning of the text.

Mandates to use a packaged curriculum result in a very long block called reading with little opportunity to read. "I want our students to love literacy, love learning to read, love writing, find real purpose to do that in the world," one teacher told us, but "I don't feel like we necessarily have that." Another teacher of older students shared this *testimonio* about the outcomes for students such enjoyment-deprived literacy programs can create:

"I mean, [the literacy program books] are lame and boring. I had some kids in the lower group there. They're color-coded – blue is beginning, gold is intermediate, and teal is like you're almost out of this class, they're like real chapter books. And the blue books are like, 'This is a cow. The cow says moo.' And so, if you're 15 and this is what we're reading, now you really hate reading. So, when we were done, these three boys were like, 'Can we just read the gold books? Just show us what they look like.' So, they tried it. And they were able to do it."

Besides reducing the time multilingual students spend on essential literacy components like comprehension, oral language, and writing, any literacy program that results in students that "really hate reading" and who are deprived of "texts they want to read" deserves interrogation.

Tierney and Pearson (2024) challenge the idea that increasing instruction aligned with the science of reading should take precedence over an equally important science of teaching minoritized students that is learner-centered and builds on students' strengths and perspectives. Testimonios presented above illustrate programs that are not learner centered. Furthermore, the method-centered programs described above do not bring the experiences of EB/EL students into the classroom thereby decreasing opportunities to engage and motivate these students.

In contrast, the work of Wyse and Hacking (2024) introduces a new theory and model of teaching, which provides a rationale for a comprehensive integrated approach to teaching reading and writing, evidence for the importance of teaching children to write as they are learning to read, and an alternative to a focus on synthetic phonics. The strongest link between reading and writing is that they both rely heavily on the same core language skills, including vocabulary, grammar, and text structure, which means that improving one skill significantly enhances the other; essentially, reading provides the input (ideas, language patterns) that fuels writing as an output, creating a symbiotic relationship between the two activities. In this model writing is not delayed or minimized in the curriculum while children learn to read, rather writing and reading are given equal weight and done concurrently.

Finding #4: The implementation of dual language programs has been compromised and threatened.

Beyond reducing EB/EL students' amount and quality of ELD, the time requirements and phonics focus that characterize many SoR-aligned curricula also encroach on dual language and bilingual programs. Teachers in these programs reported pressure to reduce time spent teaching in Spanish and developing Spanish literacy saying, "Teachers didn't feel like they had the time, they didn't feel like they had the resources, and they didn't feel like they had the support... they felt like that [literacy instruction] had to be in English."

To illustrate how this looks in practice, one teacher explained, "So if I am a 90/10 kindergarten, and my 10% is already in phonics in English, I'm now giving up another 30 minutes from my

² A "90/10" model refers to teaching 90% of the day in a non-English language and 10% of the day in English in kindergarten. Across the grades, the proportions are reduced for the non-English language and increased for English until a 50/50 proportion is achieved, usually around the third or fourth grade.

Spanish Literacy block to give to my supplemental services, which are in English. My EL teachers, my EL specialists, paras – when they come in, they're not giving instruction in Spanish. They're giving instruction in English. So, I would say it's not necessarily the correct language curriculum. The schedule is not honoring our allocated minutes." Using English time for phonics and interventions also crowds out time for English language development, which is critical for ELs success in dual language education. This prioritization of (English) phonics and literacy pressures bilingual programs to compromise their very mission in the name of fulfilling SoR goals, with one educator reporting that, "Principals tell our teachers that because the state assessment was in English, that for the last month and a half of the school year, they should stop teaching in Spanish and just teach in English."

Unfortunately, there is nothing new about the sense that only English instruction and learning are important, although such views in programs explicitly dedicated to developing bilingualism and biliteracy are especially problematic, not least of all because they seem to be exacerbated by SoR programs. A dual language Spanish teacher described the dominance of English this way:

"La ciencia de lectura te da toda la información de como leer en inglés. Todo está en inglés. Todos los recursos son en inglés. Las capacitaciones son en inglés. Y siempre el español queda desprotegido.... Te dicen cómo se enseña las sílabas en inglés, cómo enseñar los sonidos. Todo, todo en inglés. Pero no te dan nada en español." [The Science of Reading gives you all of the information about how to teach reading in English. Everything is in English. All of the resources are in English. The professional learning sessions are in English. And Spanish is always unprotected. They teach you how to teach the syllables in English, how to teach the sounds. Everything, everything in English, but they do not give you anything in Spanish.] This results in a loss not only of instructional time but of valuing bilingualism and biliteracy in their own right, as "there seems to be an erosion of teaching Spanish for Spanish's sake."

For students in bilingual/biliterate/dual language programs, there is still a dearth of books in Spanish and a tendency for the "Spanish curriculum [to] echo the English curriculum" "instead of being part of what the kids need to grow in the language." In other words, there is still little attention to teaching foundational and other skills using methods that are authentic to the language. This situation is grounded in the assumption by decision makers that teaching literacy in Spanish is the same as teaching literacy in English. There are still fewer books in Spanish than English and overall, there are still inequitable resources to teach literacy in Spanish and other non-English languages. One teacher described this discrepancy as, "There seems to be kind of an absence of a focus on authentic literature in Spanish. A lot of the materials that are used are trade books, kind of traditional translations of traditional English materials. And it's odd because I think both sides have the intent to support Spanish as the culture and an understanding of the culture, but it's like the materials just aren't really there." In addition, many bilingual programs are designed as parallel monolingual programs, not for biliteracy development. Dual language teachers also reported that attention to biliteracy and biliteracy pedagogy is absent in both professional learning and materials. While this has historically been the case, it has been exacerbated recently with teachers being asked to stop using some of the bilingual materials they have used in the past - particularly Spanish language materials - and yet new replacement materials are not being provided.

In addition to reduced Spanish language and biliteracy instruction, only 40% of respondents reported that cross-linguistic connections were included in their formal literacy curriculum, representing the lowest rate of inclusion of any literacy component in our survey. Even when cross-language connections were included, many teachers specified that they were only minimal ("The curriculum doesn't have it. Maybe 1%? Maybe a little bit. Somewhere maybe"), not frequently incorporated ("They had cross linguistic connections, like a mini manual. Was it used? I don't think so"), or marginal rather than central ("Cross linguistic connections [are] not written in the curriculum, I think it's more of a guidance"). The lack of integration could be due to a lack of time, as some teachers said their program time allocations had "reduced the time that we're allowed to do that." But more likely, the lack of attention to this component is due to a lack of training and support (such as by including explicit activities in the teachers' manual as guidance. One teacher aptly reflected that in order to incorporate cross-language connections "teachers have to understand what that means, and how to deliver it," which had not been common in her experience.

The failure of many SoR-based literacy programs to account for bilingual students and bilingual programs reflects an erroneous one-size-fits-all approach to literacy in which students' needs are falsely homogenized, ignoring approaches and needs specific to EB/EL students in favor of those designed for to English monolingual learners in English monolingual programs. "Making the statement that this Science of Reading is a good way to teach all kids no matter in what language is actually just not accurate when it's missing oracy, it's missing contextualized instruction, and it's missing metalinguistic awareness, which is essential in a biliteracy setting," a teacher summarized. In these ways, SoR-based curricula represent a threat to the development of bilingualism and biliteracy.

Finding #5: Access to the full curriculum for all students has been reduced.

Standards-based school reform through the No Child Left Behind Act of 2002 and the Every Student Succeeds Act of 2015 has had the unintentional effect of narrowing the curriculum taught to all children. For years, many teachers have expressed concerns that efforts to improve reading and math achievement have left little time for teaching science, social studies and the arts. Teachers interviewed for this study indicate that with the new SoR mandates and extra time required for teaching foundational skills there is even less time for science and social studies, and in some cases, they have literally been eliminated from the school day. Participants reported that time devoted to teaching science and social studies has been reduced, and they do not feel that this is equitable particularly for EB/EL students. As reported above, teachers repeatedly said they are stressed for time to teach everything, saying, "A lot of times if they said a reading lesson is gonna take 30 minutes, it would take an hour," and "We only have two or three days to teach what the curriculum is asking us to teach in five days." This is likely due to the fact that so much time needs to be allocated to the teaching of foundational skills and no time has been added to the school day.

To accommodate these time constraints, teachers often reported reducing or rotating science and social studies: "Literacy and math are the two most important, so science and social studies are not integrated as much. Those are the ones that just don't seem to get covered enough," one teacher told us, with another adding, "It's not enough time, we had to feel bad saying that sometimes we had to skip the social studies and the science part...in order to dedicate more time

to the reading concept the student is going to be taking assessment on." Although all students deserve and have a right to a fully developed, rich, and comprehensive curriculum, it is imperative to note here that the Castañeda standards (1981) require that students identified as EB/EL have full access to the curriculum while they are learning English. Eliminating or reducing opportunities to learn as a result of new SOR mandates may, in fact, represent a violation of federal mandates for EB/EL students that merits further investigation.

A new study by Rekeya, Kim, Rich and Fitzgerald (2024) examined a classroom-based literacy intervention on reading and argumentative writing outcomes among grades 1 and 2 EB/ELs and their monolingual English peers. The intervention consisted of 20 lessons in science and social studies thematic units. The units were designed to build students' content and vocabulary knowledge through informational texts and concept mapping? While the intervention did not improve reading proficiency, it did significantly improve students' argumentative writing in both science and social studies. The treatment effect on reading proficiency among ELs was attributed to their improved domain-specific vocabulary knowledge and oral English proficiency, leading the researchers to conclude that the intervention was particularly effective for EB/ELs.

Findings from this study support teachers' concern that their EB/EL students are disadvantaged in both language and literacy when they are not provided opportunities to learn science and social studies. It is through the learning of content that students develop a wide vocabulary that builds comprehension, and it is in the context of learning content that literacy has purpose, as students engage with text and write about what they are learning.

Finding #6 - Teachers report negative impacts on their professional practice.

The findings in this section reveal that the new SoR mandates have impacted both teaching practices and teacher well-being, though in varying ways. Some teachers reported being expected to implement new programs with minimal guidance, leaving them to figure things out on their own. Others were given strict scripts with PowerPoint slides and told not to deviate from them. While some found the scripted approach brought consistency, others felt the lack of guidance and rushed implementation led to inconsistency.

Teachers expressed contrasting views: some felt they had the freedom to design their reading blocks, while others believed their professional autonomy was replaced by pre-made scripts and rigid pacing guides. Many felt pressure to adhere to these guides even when students struggled to follow along. This inconsistency has caused anxiety and confusion, especially for new teachers. In our sample, 62% of participants had been in their roles for five years or less.

The mandates have also introduced isolated components, like phonics, without adding time to accommodate them, leading teachers to reduce other important literacy activities. New and relatively inexperienced teachers are particularly affected, as they require more support to balance the new requirements with effective teaching practices.

^{3 &}quot;Concept maps" are visual representations of information. They can take the forms of charts, graphics, organizers, tables, etc. They are useful for English Learners because they add visual representations to illustrate the concepts presented during instruction.

Some feel forced to follow the script at the expense of student understanding, while others lack the training to implement the program effectively.

Teachers also voiced concerns about losing autonomy. Despite the pressures, some resisted implementing practices not responsive to the needs of English learners and continued incorporating beneficial activities such as read-alouds, daily writing, and culturally responsive teaching. Read-alouds, in particular, were seen as crucial for engaging students and supporting bilingual literacy development, even though some were told there was no time for them under the new mandates.

The following teacher testimonies illustrate the frustration and anxiety caused by these mandates, as well as the resistance from those asserting their agency to prioritize what they believe is best for their students.

"The training from the district came at the exact same time as they were getting the curriculum, and it was quite rushed. And teachers want to be prepared, our teachers here want to be prepared, and they definitely felt a lot of anxiety and just question themselves, and their teaching practice. So, it was definitely a lot of that kind of sentiment."

"I'm concerned about the fact that we're talking about the Science of Reading, where I don't see a lot of studies and science actually behind it. That's what concerns me. I would be a lot less concerned if I actually knew that there had studies to show this works for ESL learners."

"And with the Science of Reading push, it gets interpreted in different ways. And I think one way it's been interpreted as just solely phonics, which is only one component, and all those other components are missing."

"I think there's been a very strict interpretation or almost misinterpretation of the Science of Reading, meaning that it's just work on foundational skills, phonics, phonemic awareness. And students are doing that in the classroom for 60 minutes a day, it's not connected to anything else they're working on. So, it has to be a very skilled teacher who will find the connections, but [the curriculum is] not written in a way for teachers who maybe aren't at that point in their careers or have made all those connections yet. They're not able or not supported in pointing those things out."

Teacher agency

Teachers in the study reported that SoR mandates have reduced their agency. However, some pushed back by refusing to adopt practices they believed were not responsive to the needs of English learners and continued using those they found beneficial, such as:

- Read-alouds
- Daily writing
- Oral language teaching
- Culturally responsive teaching

Many educators emphasized that effective literacy programs must include read-alouds, which engage students and foster a love of reading. Despite being told there was no time for them under SoR mandates, teachers continued using read-alouds, particularly for EB/ELs, as they support oral language development, biliteracy, and exposure to diverse cultures. Teachers also resisted limiting daily writing, despite pressure to prioritize foundational skills. Here are a few examples of teacher testimonies illustrating their resistance:

"I have a big voice for our kids, and especially with literacy and our English Learners and our special education students, I use my voice. I've been told 'no' before, and then I listen to the why 'No.' 'Okay, now let me show you this. Let me show you how far my kids are coming. And how much they're being enriched.' So, I use my voice, and the data that I have."

"In the district we just adopted Letter Land. We used to do Dibbles, for many, many years, and my department really worked to dismantle Dibbles. We almost got murdered for it, but it happened."

"Our program follows pretty much everything to the core. Whatever we're told to do, we do. However, I do use my teacher agency in the classroom, to make those changes when it comes to culture, when it comes to vocabulary, when it comes to giving them more time to listen to things or for the speaking part."

"Our use of the dictado was questioned but we have not stopped doing it because it is effective, but we had to demonstrate it to the principal and other specialists that it was working."

Finding #7 - Some literacy programs lack culturally inclusive and relevant content.

Teachers repeatedly cited a lack of cultural inclusiveness in some mandated materials, and at times a lack of cultural relevance. They reported that, at best, there was only marginal or token inclusion of any kind of diversity including those that were specified to teach foundational skills and those that were focused on teaching knowledge. Teachers went so far as to say many of their materials presented biased and ethnocentric perspectives.

Respondents reported using a wide variety of literacy curricula, representing 55 distinct programs, although not all respondents named their mandated curriculum and some respondents reported using materials created at the district level. Half of the respondents reported that the role of culturally responsive materials was consistently absent. A few teachers voiced concerns over the quality, historical accuracy, and appropriateness of these materials, telling us they even found some lessons offensive.

This finding is disturbing. In several districts, teachers wrote to their district offices saying they refused to teach the lessons and content of the materials because they found the material both historically inaccurate and inappropriate. Teachers shared that ethnocentric materials and lessons are not only harmful for EB/EL children, but also for monolingual English-speaking children. It is important to note that much of the objectionable content was part of the mandated curriculum in some districts. It is a problem that there are mandated materials that have questionable content and that teachers are not provided culturally appropriate materials for their children. The following quotes illustrate these experiences across districts and mandated curricula.

"I was just really disappointed in the curriculum that was chosen.... We thought there was this movement of trying to move away from your central topics and be a little bit more open to culturally relevant materials and curriculums. It really felt like a step backwards. It was kind of like, what just happened? I don't know why it was surprising."

"It's really frustrating that it's not really culturally relevant to our students, because that just means more work on our end, because now we've got to play the role of curriculum designing as well as teaching, which I feel is really inequitable."

"It's very weak, the culturally relevant and authentic literature in Spanish. And I mean, we're talking about Spanish right? They do nursery rhymes or they do a lot of English translated material."

"So it feels very like, 'Oh, we have to throw a diversity book in there.' Like, 'Here's Jabari Jumps,' like, randomly in there, and I love that book, but it just feels so insincere. Forced."

"I used to teach that Thanksgiving is a day of celebration in some cultures and a day of mourning on many Native American reservations and communities. Now I have a program that teaches only that the Indians and Pilgrims were friends and had Thanksgiving together. I told my principal I was not teaching this unless I could teach both sides."

"A few teachers met with our principal to say that we are concerned that our materials are completely lacking in content about social justice."

Sadly, and ironically, teachers reported that in some programs, lessons have been developed in Spanish including ethnocentric topics. Ethnocentric content, even if translated into Spanish, does not eliminate the problem nor address the need for culturally relevant and inclusive instructional materials. Rather, biased, inaccurate content is objectionable in any language.

Conclusions

The findings from this study highlight significant concerns about the implementation of Science of Reading (SoR) initiatives, particularly for ELs/EBs. Teachers describe stressful and underresourced environments that inadequately support these students, whether in English-medium or dual language/bilingual settings. Research suggests that perceived academic gaps for students of color, EB/EL students, and low-income children are more likely due to opportunity gaps rather than actual differences in academic potential (Terry, 2021). The study further indicates that the way SoR initiatives are implemented often reduces opportunities for students to learn, especially in ways supported by emerging research.

Teachers expressed growing frustration with the pressure to focus primarily on foundational reading skills, often at the expense of a more comprehensive literacy curriculum. This narrow focus sidelines crucial areas such as comprehension, writing, engagement, oral language development, and additional supports needed for EB/EL students. While teachers recognize the value of foundational skill instruction, they struggle with the inadequacy of current materials and the lack of alignment with the diverse needs of their students. Many teachers are left trying to adapt these programs on their own, which adds to their workload and increases stress.

A key issue raised by teachers is that professional development and resources provided under SoR mandates are often designed with monolingual English-speaking students in mind, lacking sufficient accommodations for EB/EL students. Teachers frequently noted that training programs and instructional materials emphasize approaches that assume English proficiency, leaving bilingual or non-English-speaking students at a disadvantage. Despite the growing diversity of classrooms, teachers report that these trainings rarely address how to support students learning in two languages or those developing literacy in English as a second language.

Moreover, teachers expressed concerns about the equity and inclusivity of these initiatives, as the implementation often perpetuates an ethnocentric view of literacy. The focus on monolingual English instruction overlooks the cultural and linguistic assets that EB/EL students bring to the classroom. This not only marginalizes EB/EL students but also limits the exposure of monolingual students to the diverse cultures and languages present in their communities.

Testimonios from educators reveal a common theme: the implementation of SoR programs often neglects the needs of multilingual learners, offering minimal guidance or support for adapting instruction to meet their needs. In many cases, teachers reported that recommendations for EB/EL students were reduced to superficial suggestions that did little to address the broader learning needs of these students. This lack of meaningful attention to diverse learners leaves teachers feeling unsupported and concerned about how to effectively serve their students. The following testimonios exemplify this finding:

"Especially our new-to-country [students], they can't read at grade level, they don't have the letter alphabet principles down because this is all new to them. For you to say they might have something cognitively wrong with their brain because they can't say their ABCs [is]not right to me. That's my concern with our state mandate, is the state is dictating what programs we can use. If they're not considering the whole picture of all our students, how do we reach those students?"

"Over 50% of our students are English language learners, and they don't have a quality curriculum that would address their needs at all. At all. And it's very shameful."

"And I really feel that multilingual learners are always the afterthought. We see a curriculum, there'll be one sentence on a page, 'And for your multilingual learners, give them a sentence stem.' And it's just like that. It shouldn't be that way."

"In our district, our English language learners have been neglected for decades, decades and decades now."

"How are those resources vetted? And who are they vetted for? Those are things that we're always navigating because when you're 70% multilingual, they're not vetted for our school districts, they're vetted for the 12% [of English Learner enrollment] national average. And it's not necessarily meeting the needs of our kids."

"It gives the [example for EB/ELs in the] box in the margins... it literally puts them on the margins. And in our schools, our K-3 demographic is 66% English learners. So, we're convincing ourselves that a box in the margins is providing adequate support for 66% of the students."

While many teachers recognize the importance of explicit reading instruction, the ways these programs are implemented—without sufficient attention to the diverse needs of students—creates significant challenges. The rigid application of SoR initiatives has resulted in the reduction of time devoted to ELD instruction, and compromises to dual language and bilingual programs, limiting students' access to a full, equitable curriculum. These issues not only affect teachers but also contribute to the ongoing marginalization of multilingual students.

Recommendations

The findings from this study indicate that teachers of EB/EL students have been significantly impacted by the implementation of SoR mandates across all the sites where interviews took place. This includes both ELD/ESL/English-only instructed

classrooms as well as bilingual/biliterate/dual language programs. Based on these findings, we offer the following recommendations for policy makers, state departments of education, districts, teachers and publishers.

The findings show that current implementation of SoR approaches to literacy are problematic. Teachers and students need resources, training, and support systems that recognize and address the linguistic and cultural diversity of today's classrooms. Without such changes, SoR initiatives risk perpetuating historical inequities and continuing to leave behind students who deserve a more inclusive and comprehensive approach to literacy instruction.

We cannot afford to lose another generation to literacy programs that aren't designed or delivered based on what we *know* is needed for them, or to relegate them to ineffective instructional approaches that, once again, will leave them behind.

Policy Makers

- Revise current state and local policies to align with more comprehensive approaches to (bi)literacy development and an explicit focus on EB/EL students.
- Develop federal, state, and local policies to vigorously expand Dual Language and developmental bilingual programs in multiple languages, with the goal of fostering biliteracy.

State Departments of Education

- Align state-mandated literacy directives and guidance with both SoR and EB/EL research.
- States should update their state directives to include specific recommendations for EBs/ELs instruction.
- Provide guidance on the Implementation of Comprehensive (Bi)literacy Models (previously represented) that:

- Incorporate strategies for engagement, as well as songs, poems, access to books and a
 variety of opportunities to teach language as connected discourse. Strategies for
 engagement need to be coupled with increased access to books. Access to books is a
 precursor to actually becoming a reader. This means resources for books, class libraries,
 time to read, etc.
- Develop grade-level model schedules for the entire school day ensuring content areas such as science, social studies and the arts are included
- Integrate literacy and content instruction to support comprehension and vocabulary development.
- Include culturally relevant materials centered on social justice.

Districts

- Increase support for teachers, coaches, and others tasked with implementing SoR initiatives, and ensuring that modifications for EB/EL students are in place.
- Invest in professional development that is:
 - o provided in Spanish and other non-English languages.
 - focused on literacy development that is specific to the internal structures of non-English languages in dual language programs
 - o based on the research on effective literacy instruction for ELs/EBs
 - structured to integrate research with instruction and the use of high quality books
- Invest resources to examine the impact of SoR policies on working conditions for teachers.
- Conduct curriculum bias reviews to ensure equity.

Teachers

- Focus attention on developing oral language, writing, and the teaching of comprehension in EB/EL students.
- Ensure that designated ELD is not replaced with foundational skills designed for monolingual English children.

Publishers

- Publish materials that are aligned with EB/EL research and support multilingual and minoritized learners' language, literacy, and identity development.
- Provide a wide range of books for classroom libraries, that includes various genres and topics to encourage students to engage in reading books from cover to cover for both enjoyment and learning.
- Publish materials that support the elements of a comprehensive approach to literacy that centers the needs of EL/EBs.
- Publish materials that are culturally and linguistically accurate and relevant.

Appendix A

Table 2

Emphasized literacy components in response to open-ended interview question, "If your formal curriculum calls out any literacy component as more important than others, which are promoted as primary or 'most important'?"

Literacy Component/ Strategies*	Count	Percent
Phonics (Includes: Phonics, phonemic awareness, decoding, alphabet, letter recognition, letter-sound correspondence, sounds, sound isolation, segmenting words, syllables)		45%
Comprehension (Includes: Comprehension, find evidence from text)	20	23%
Vocabulary (Includes: Vocabulary, sentence with vocabulary)	8	9%
Fluency (Includes: Fluency, word recognition)	7	8%
Writing	3	3%
Joy of reading (Includes: Joy of reading, rich literature texts)	2	2%
Foundational skills	2	2%
Read alouds	2	2%
Oral language	2	2%
Reader/writer workshop		1%

^{*}All responses reflect interviewee statements

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About the Authors, Publisher, and Related Readings

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Publisher

The National Committee for Effective Literacy uplifts research, policies, and practices to ensure that English learners/emergent bilinguals leave school as proficient readers and writers in English — and preferably more languages — and who thrive and succeed in school and their communities.

Related Readings

<u>Understanding the Difference: The Science of Reading and Implementation for English</u> <u>Learners/Emergent Bilinguals (ELs/EBs)</u>

<u>A Description of a Comprehensive Approach to Literacy</u>



The National Committee for Effective Literacy (NCEL) uplifts research, policies, and practices to ensure that emergent bilinguals leave school as proficient readers and writers in English — and preferably more languages — and who thrive and succeed in school and their communities. We are researchers, teacher educators, teachers, administrators, school board members, and advocates from across the nation with deep expertise in literacy and the education of emergent bilingual/multilingual students.







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