School-Based Partnership Amid Science of Reading Reform: Collaborating on Instruction with Rural Elementary Educators

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A thesis submitted to the Faculty of the Graduate School of the University of Colorado in partial fulfillment of the requirement for the degree of Doctor of Philosophy School of Education

2025

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Abstract

This dissertation explored a school-based professional development (PD) partnership between elementary educators in a rural school in eastern Colorado and literacy researchers from a large flagship university. I studied my collaborations with a team of second-grade teachers and school administrators to investigate nuances within teacher learning and school-university partnerships. This investigation took place during a distinctive moment in elementary reading policy, characterized by statewide top-down policy mandates inspired by a body of research known as the Science of Reading (SOR). Drawing on a range of theoretical traditions, including post structuralism, critical perspectives on policy, and practitioner inquiry, I engaged in qualitative data collection and analysis across several data sources collected throughout three years of close collaboration with my partner school. My findings illustrate that important tensions arose between administrators', researchers', and teachers' expectations of professional learning against the backdrop of SOR policy (Article 1). They also demonstrate how directing analytic attention toward organizational factors like PD, curriculum, and leadership can help resist deficit narratives about teachers and illuminate possibilities for agentic positioning of teachers (Article 2). Finally, my findings suggest that pairing conceptual frameworks like place conscious paradigms with methodologies like research-practice partnerships (RPPs) holds special value in an age of elementary reading reform (Article 3). My study has implications for future inquiry into the rhetoric and implementation of SOR policy, elucidating the need for authentic partnerships with in-service teachers that build knowledge of the ecosystem of a particular school context in order to elevate fair, agentic, and multidimensional positionings of teachers.

Key words: Research practice partnerships, policy, policy implementation, elementary reading, rural, in-service teachers, professional development

Acknowledgements

This dissertation would not be possible without the support and collaboration I have received from countless people over the years. They are co-authors of this work, thanks to their myriad contributions of time, listening, encouragement, and more.

Thank you to Dr. Elizabeth Dutro, my advisor, mentor, and research partner, who has helped me discover my identity as a researcher and teacher educator by setting a powerful example of what it means to lead with love, ask important questions, and stand for what matters. Words cannot express how profoundly she has impacted me and how instrumental she has been in bringing this dissertation to life.

The faculty at CU Boulder has provided invaluable mentorship across all stages of my doctoral journey. To the members of my committee, Dr. Silvia Noguerón-Liu, Dr. Emily Gleason, Dr. Wendy Glenn, and Dr. Leah Sprain, thank you for helping to shape my ideas into what you see in this dissertation.

To the participants in this research—the teachers, administrators, and children who welcomed me into their school with open arms—thank you for trusting me, confiding in me, teaching with me, laughing with me, and allowing me to be part of your community. I have learned so much from doing the work alongside you and feel incredibly privileged to be your partner.

I am immensely grateful for the close and sustaining relationships I have built with members of my cohort and the vibrant, ever-encouraging community in the Literacy Studies program area. Thank you to my friends and colleagues Kyla McClure, Kyle Kopsick, and Chelsea Kent, who were always happy to lend a listening ear and just be there through the ups and downs. To Emily Johns-O'Leary, thank you for being a wonderful friend and an amazing coauthor on my first-ever published work.

I never would have embarked on this journey if not for my mother, Cindy Allen. Thank you for pushing me even when I am afraid, for helping me believe that what I have to say is important, and for understanding that first-grade me playing teacher with stuffed animals would lead to all this. I never would have made it through this journey without my twin brother, Patrick Cox. Thank you for being my fiercest supporter, the greatest comfort in times of stress, a safe space, and my best friend.

Though I have listed and acknowledged my co-authors and supporters here, I know there are some I have missed. I am incredibly grateful for everyone named here and so many others who made this work possible.

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Chapter One: Introduction

Being a teacher has always been one of my favorite things about myself. After making it through a turbulent first year at a small rural elementary school in southern Louisiana, I decided not only that I wanted to keep teaching, but I wanted to be a "*good"* teacher, a category I sought to neatly operationalize through binaries, lines in the sand about the things good teachers do and do not do. Good teachers achieve or surpass the student learning targets they set at the beginning of the year about student scores on standardized tests or interim assessments. Good teachers have orderly, calm, well-run classrooms. Good teachers lead an entire class to perform on-grade level. Good teachers execute fast-paced lessons with flawless classroom management and efficient routines and procedures. The list went on and on, accruing more indicators of "good" teaching as I progressed through my alternative certification program with Teach For America and attended professional development sponsored by local charter school networks in Baton Rouge and New Orleans.

When I decided to join the staff at a brand-new charter school in Baton Rouge, I found the perfect home for my quest to be a good teacher. The quest was predicated on an idea reflected in the charter's operating structure, the idea that good teaching could be defined as a set of observable and measurable skills, techniques, and mindsets that simply had to be inculcated in novice educators. I leaned into that premise, absorbing every strategy and standard touted by my principal as effective, best practice, and high leverage for student achievement. Later, as an instructional coach, I reproduced the same logic. The resources I used, such as a charter-produced tome on how to "Get Better Faster" contained a comprehensive list of what good teachers do. My job was to compare that list to what I saw in teachers' classrooms, identify gaps in their practice, and address those gaps by showing them how to add in whatever it was they

were missing. In this way, the construct of "good teaching" was passed down the within-school hierarchy: it was filtered from its decontextualized, idealized definition into a technical guidebook, then internalized by instructional leaders like me who diagnosed where teachers were falling short. All of this operated in service of student achievement, upholding a sort of chain reaction: effective instructional leaders produced effective teachers, effective teachers produced high performing students, and effectiveness, on all fronts, is what kept the school open, satisfying its contract with the state to secure certain results on achievement tests.

These reflections on my seven years as an education practitioner reveal a core tension around ideas like "best practices" and effective teaching: being a "good" teacher is a goal imbued with personal and professional significance, which can become fraught when "good" teaching is positioned as a commodity to be produced through professional development, training, or instructional leadership. Yet distilling teaching down into a set of replicable, practicable techniques was key for my own growth as a teacher; like others in the teacher education sphere (Schutz & Rainey, 2020), I maintain that there are principled ways to provide clarity around what to do as a teacher that can provide valuable support to novice and experienced educators alike.

Crucially, though, I am using this dissertation to submit an additional, related position, namely that attending to what teachers do in the daily life of a classroom–the methods they use, the way they plan, the materials they select–must also involve investing in what teachers know, what they believe, and how they learn. Additionally, in asserting this position, I am aligning myself to the larger project of practitioner inquiry, which, with its roots in critical research traditions and grassroots teacher groups, seeks to recognize and honor teacher learning in the context of teachers' own communities, schools, and the children they serve (Cochran-Smith &

Lytle, 2009). When I was teaching and leading teachers, there was constant pressure to change and improve teaching practice on all fronts, pressure that has been compounded in recent years by a movement to strengthen reading education in the United States. Then and now, my position is that improving teaching practice is a necessary and important goal. Achieving that goal in ways that serve children and teachers requires seeing teachers not as problems to be fixed but as learners who are already capable of rich reflection and refinement of their own practice.

This shift in perspective represents a consequential reorganization of how I think about my own growth as a teacher, my experience as an instructional leader, and my future as a literacy researcher partnering with in-service teachers. When I was a teacher and instructional coach, my professional life was organized around the urgently felt imperative to improve teacher practice, including my own, in order to get such practice to conform with a predetermined vision of what the best or most effective teachers do. Because achieving this goal was so important, so pressing, so central to producing the achievement results necessary to keep the school open, it was justifiable to take the most direct route to changing teacher practice, even when that route involved observing, surveilling, and evaluating teachers constantly in order to illuminate and address supposed gaps in their competency. The goal to change teacher practice remains important, but I now understand that the means by which we seek it matter, too.

After being afforded opportunities in graduate school to reflect on some of the operating assumptions in my former approach to changing teacher practice, I am attuned to the cost of positioning teachers as in need of remediation. While it can accelerate growth in a teacher's comfort and competency in certain instructional practices, as it did in my case as a teacher who transitioned into instructional coaching after only four years of classroom experience, it also implies that teachers learn when forces external to them act on their behalf to identify and

mitigate purported deficiencies in their teaching. I wanted to find a different lens through which to regard teacher development not because I believe that there are never any ways for teachers to become better in their practice. Every teacher knows that opportunities for growth are boundless. I knew there was a way to stop seeing those places for improvement as shortcomings in individual teachers to be "fixed" by instructional leaders who "know better," a way to foreground teachers' ability to grow their *own* practice in relationship with others. The approach to professional learning at the heart of this dissertation provided me a means by which to achieve this new type of thinking. It preserved the drive I have as a teacher and instructional leader to enrich practice, set meaningful instructional goals, and make intentional plans for pursuing them, while also committing to the idea that getting better is something teachers can do together, as individuals and as a community, through their own reflection and knowledge generation. One of the central arguments in my dissertation is that taking this position, that getting better and deepening practice is always possible and always the goal, and that teachers have what it takes to plan, pursue, and achieve that goal. I believe that such a view of teachers and their learning is particularly important now, in an era where reform to elementary reading instruction is defined by its aims to remediate what teachers do in classrooms.

Teaching, Learning, and Leading in an Era of the Science of Reading

When I learned to teach reading to kindergarten, first, and second grade students, my instruction came mostly through an alternative certification program and was premised on an approach called balanced literacy. Balanced literacy is an instructional approach that emerged in the 1990's largely as a way to achieve compromise in the long-waged Reading Wars, which have spanned many years and involved a "pendulum swing" between two main arguments about how to best teach reading. One argument is based on a whole language model that assumes children

discover the meaning of words through experiences in a print-rich environment and by contextual guessing, and another argument is based on a phonics model that emphasizes explicit, systematic instruction about the relationships between letters and sounds (Castles et al., 2018). Arising as the middle ground between these two extremes, balanced literacy programs tend to include "a bit of everything," focusing on meaning making and introducing some phonics instruction, but not always explicitly (Castles et al., 2018; Burkins & Yates, 2021). Like many teachers, including the 70% of K-2 teachers who said their schools used balanced literacy (Sutherland & Chakrabarti, 2022), I learned to teach reading through the lens of balanced literacy. My mentors and instructors from Teach For America urged me to strike a balance between building students' phonics knowledge and foregrounding meaning-making in reading by teaching students to guess words they could not sound out, to memorize irregularly spelled words, and to love reading, even books with words they could not decode.

Teaching methods like these, as well as some of the core premises of balanced literacy, have been scrutinized in media, research, and policy over the past five years. The movement to re-examine and critique balanced literacy was galvanized by a body of research known as the Science of Reading (SOR). The SOR has existed for five decades and consists of studies conducted by researchers from a variety of disciplines, which use scientific evidence and experimental designs to answer questions about reading development, reading difficulty, reading instruction and intervention, among other topics (The Reading League, 2022). As such, the SOR emphasizes the use of the scientific method to plan and justify solutions to improve student reading, often focused on explicit systematic phonics instruction (Shanahan, 2020), as well as the other Five Pillars of Reading introduced by the National Reading Panel in 2000 (National Institute of Child Health and Human Development (NICHHD), 2000). The SOR also informs

structured literacy, an instructional approach that stands in contrast to whole language and balanced literacy instruction (Spear-Swerling, 2019).

According to podcasts, news articles, social media, and policy discussions (e.g., Goldstein, 2022; MacPhee et al., 2021), the problem is that the everyday way American children learn to read, often according to balanced literacy, does not reflect the scientific findings about reading from the SOR. Furthermore, this presumed lack of alignment between reading instruction and reading science is the assumed culprit for U.S. students' persistent levels of low achievement on standardized tests of reading proficiency (Schwartz, 2022). The supposed gap between how reading classrooms run and what scientific evidence shows about reading has become the subject of reports like Emily Hanford's (2022) podcast that asserts that educators were "sold a story" about how children learn to read, as well as legislation passed in over twenty five states since the podcast, by policymakers seeking to make public reading instruction more evidence-based (Peak, 2024). Colorado's SOR-inspired legislation, the Reading to Ensure Academic Development (READ) Act, was originally passed in 2012 and updated in 2019 to include mandates about curriculum selection and teacher training. One consequence of the media portrayal of the SOR and legislation is the construction of a conceptual metaphor that reading is war, with the accompanying implication that educators who stay loyal to balanced literacy are akin to enemy combatants (MacPhee et al., 2021). Moreover, the prominence of the SOR in policy and public discussions evokes an assumption that is particularly salient to my dissertation study, the assumption that teachers' existing practices and mindsets must be expunged, wiped clean of any vestiges of the "wrong" way to teach reading, so that the "right," most effective, and most scientific content might take their place.

Centrally, the problem as I see it is not that there is a wave of policy pressure and public, media-circulated calls to change or update the way teachers teach reading. The way we teach reading may very well need to change–that is something I appreciate as an educator who would teach reading very differently now than I did five years ago in my balanced literacy classroom. More and more stakeholders, from parents to principals to policymakers to curriculum companies, agree that significant pedagogical transformation is necessary in reading education. However, a number of related concerns arise from this deeply felt need to transform reading pedagogy. For one, recent history of previous policy initiatives shows how ideas of "evidence-based practices" can quickly be co-opted to fuel oppressive moves to censor curriculum and opportunities for teachers and students to engage with identity and racial and other injustices through texts and discussions. In addition, a narrow focus on producing such transformation at all costs may come at the price of further devaluing teachers, pathologizing what they know and how they teach. Finally, the ever-present focus on reading instruction in service of assessed reading proficiency runs the risk of excluding other deeply valuable language, literacies, and language practices (Aukerman & Chambers Schuldt, 2021; Noguerón-Liu, 2020).

For teacher practice, and indeed whole schools, to be animated by the SOR, teachers must be called in as key, valuable, and knowledgeable agents of change, not problems to be solved (Hoffman et al., 2020). This is a crucial point in framing my dissertation study, for when I say that teachers need to be called in as agents of change, I am contending that they themselves have the capacity to begin implementing the instructional practices mandated by the SOR in reflective and responsive ways. Those instructional practices—things like routines for orthographic mapping and phonological awareness—are ones that I and many of my teacher colleagues already value deeply. They involve pedagogical moves and strategies that can be

engaging for children, support student growth in literacy, and cultivate a love of reading. My aim is not to question the strategies that are so often referenced in contemporary reading policy mandates. Rather, the position that I adopted resolutely throughout all stages of this study is that teachers themselves represent the richest, most vast resource in the collective quest to get such practices into elementary reading classrooms. I have strived to reflect this principled stance throughout my dissertation, which at its core represents my effort to see and respond to the pressure invoked by SOR policy to change classroom practice, while centering meaningful teacher learning and educational justice and equity.

Teacher Learning, Poststructuralism, and Equity

When I say meaningful teacher learning, I am referencing my decision to draw on fields such as Practitioner Inquiry (Cochran-Smith & Lytle, 2009), Practice Based Teacher Education (Gotwalt, 2023), school-embedded professional learning (Ghousseini et al., 2022), and others that reveal the limitations of relying on top-down, formalized, one-time trainings to grow teacher knowledge and change their practice (Cochran-Smith & Lytle, 1999; Penuel et al., 2007). Policy-mandated teacher trainings such as the Colorado READ Act's 45-hour training in evidence-based practices for teaching reading assume that to teach well is to implement a scientifically generated, formal knowledge base in the daily life of the classroom and that teachers are not the ones who create new knowledge or theorize classroom practice (Cochran-Smith & Lytle, 1999). In my conceptual approach and design of this study, I challenged those assumptions by insisting that impactful learning is situated in social and cultural contexts and, thus, teachers learn in ways that grow their practice when they co-construct knowledge through inquiry about their own teaching, curriculum, students, and larger educational systems and society. Additionally, poststructuralist theories of power and subjectivity provided crucial

insight into why such an orientation to teacher learning is important and why it can be difficult to achieve, as narratives about teacher-as-technician and binaries about effective and ineffective teachers shape the realities, identities, and experiences of educators in schools.

Regarding educational equity and justice, this dissertation represents an opportunity to assert that in pursuing the goal of calibrating instruction to policy mandates and new approaches, the nuances of a local context matter. The site of my dissertation research is East Bridge Elementary (EBE)[1], a small school in rural eastern Colorado. I have been building relationships with school leaders and four in-service teachers there for two years after my advisor and I launched and sustained a school-embedded professional development (PD) partnership at the school in 2021. As I studied the partnership at EBE to explore what and how teachers learn, I remained rooted in the idea that there are unique complexities about EBE as a local context impacted by SOR reform, and that those complexities are crucial to policymakers as well as the fields of literacy studies and teacher learning. This perspective on the importance of context is premised on Eppley et al.'s (2018) posit that a single intervention does not ensure universal results in every situation, every time. This means that state-issued requirements about evidence-based reading instruction will not materialize in the same way in every school district or classroom across the state and that those variations matter to shifting practice in ways that honor knowledge and identities of both teachers and students. That is why it is valuable to study what teacher learning can look like against the backdrop of SOR policy, in one particular school and school community.

I, like Jensen (2021), Terry (2021), Aukerman & Chambers Schuldt (2021), Noguerón-Liu (2020), and others, see the prospect of transforming U.S. reading education as something that

[1] I have used a pseudonym for the name of my partner school in this dissertation.

can and should include goals that extend beyond aligning instruction to teaching methods that have been scientifically linked to improved achievement outcomes. Those goals might include teaching reading in ways that meaningfully honor students' identities while bolstering their performance in reading (Jensen, 2021), or supporting teachers to deliver effective reading instruction and, at the same time, attend to racialized narratives about reading, reading achievement, and children of color (Terry, 2021). As these researchers urge, it is possible and necessary to "expand the lens for the SOR" (Hoffman et al., 2021), widening our collective priorities to make room for not only bringing those practices into every classroom, but also making reading education reflect humanizing pedagogy and equity and justice-minded commitments.

Research Questions

The purpose of this dissertation is to study how collaborations between in-service teachers and literacy researchers can contribute to knowledge on building partnership in rural schools, while creating opportunities for meaningful, school-embedded professional learning. Importantly, this kind of professional learning may hold potential for facilitating more intentional and responsive implementation of shifted practices for teaching reading. Together with teacher and administrator colleagues, as well as my advisor and co-creator of the partnership, I pursue these objectives by sustaining a research-practice partnership (RPP) in its fourth year that aims to support teacher-led professional learning at an elementary school in rural eastern Colorado. The study took place at the school site as my collaborators and I worked together closely on literacy practice through teaching, co-teaching, and a variety of other means. Across multiple years of the partnership, I deepened collaborations by sustaining a frequent

presence at the school (two days per week) to become immersed in classrooms, the school, and community. The work was guided by three primary research questions:

1. How do elementary teachers and university researchers negotiate policy mandates to build partnership across geographic contexts toward collaborative school-embedded professional learning?
2. How do PD, curriculum, and leadership function in a small rural elementary school's path toward improving instruction and implementing SOR-inspired, state-mandated practices for teaching reading?
3. How can literacy researchers and teachers find creative and strategic ways to coordinate what the field knows about how all children learn to read with what teachers themselves know about individual children's strengths, needs, and lived experiences based on their own position and connections to communities?

Three Article Dissertation Overview

In this first chapter, I have endeavored to introduce my own experience with the often-dichotomized category of "good" or "effective" teaching and to overview the current climate around elementary reading education, all in order assert the importance of investing in collaborative, asset-based approaches to teacher learning. This is an argument I am able to make because of the work of scholars before me in a variety of disciplines, who have helped show what is possible when we value teachers' knowledge, expertise, and reflection. It is also an argument in which I am personally invested, as illustrated by the opening vignette and my own recollections of my time as a teacher and instructional coach. My values as someone who believes in the brilliance of teachers have become braided together with my readings of research and scholarly traditions that take that same stand. This dissertation is built on this confluence

between what I have always believed and what I have gotten to learn as a graduate student and an emerging literacy researcher.

In **chapter two**, I overview the conceptual framework of my study by drawing on theory and literature that grounds my work with teachers in EBE. The conceptual framing derives from concepts, insights, and principles from three main theoretical traditions: post structuralism, critical perspectives on policy, and collaborative, extended approaches to PD based on practitioner inquiry.

In **chapter three**, I discuss my methodology for the study, including the methodological lenses of research-practice partnerships and practitioner inquiry. Additionally, I will describe the teachers with whom I have been fortunate to work, the study context, my positionality as a doctoral student researcher, and my processes for data collection and analysis.

Chapters four, five, and six contain each of the three articles that comprise this dissertation. Because this dissertation follows the three-article format, the methodological approach from chapter three and the conceptual framing from chapter two span the entire study. As such, elements from these chapters are sometimes repeated across my articles.

- **Chapter four**, i.e., the first article, is oriented around RQ 1, which is interested in the ways in which researchers and teachers collaborate to cultivate opportunities for school-embedded professional learning across geographic contexts and amid state policy mandates. As first author (with co-author, Elizabeth Dutro), I analyze partnership data, including meeting notes and recordings, as well as interview data, with an eye toward what it reveals about building a teacher-centered PD partnership during an era of intense reform in how teachers teach reading. This article is aimed toward an audience of literacy researchers and teacher educators who may also feel called to deepen the field's

understanding of collaborating with teachers in positive, agentic ways against the backdrop of SOR legislation.

- **Chapter five**, i.e., the second article, takes up RQ 2 by taking a systems-level view to explore how teachers at EBE went about improving reading instruction in their building. Rather than focusing on individual teachers, this article turns analytic attention toward PD, curriculum, and leadership as conditions for instructional improvement, thus centering collaboration, shared inquiry, and an asset-based perspective on the knowledge teachers hold about children, practice, and their community context. I submitted an abstract of the second article to *Reading Research Quarterly* for consideration in their Spring 2025 special issue on the SOR and equity and was subsequently invited to submit the full manuscript. The article is currently under review.
- **Chapter six**, i.e., the third article, is a conceptual essay in which I take up the third research question to argue for the distinct value of place conscious models and collaborative research designs in a SOR era. The essay begins with a description of the contours of the current policy climate around elementary reading education, before turning to place conscious paradigms and their role in integrating issues of equity into the SOR movement. Then, I discuss methodological approaches, like research-practice partnerships (RPPs), that can support such place-conscious collaborations and facilitate a multi-directional flow of knowledge, which is particularly valuable in this moment in elementary reading education.

In **chapter seven**, I conclude my dissertation, synthesizing my main areas of learning about what it means to study elementary reading and SOR policy and rhetoric.

Chapter Two: Theoretical Framework and Review of Literature

The aim of my dissertation is to study collaborations with in-service elementary teachers in order to explore what it means for teachers to learn in an era of SOR reform and explore how professional learning structures might support teacher learning in such a reform context. Doing so holds the key for actualizing the vision of SOR policy to improve reading instruction in ways that benefit all children. In order for reading reform to impact children and teachers in equitable ways, we must take seriously the work teachers do to make sense of policy mandates and what those mandates mean for them, their students, and their practice. In this conceptual framework, I describe three interconnected theoretical lenses that help illuminate the multi-layered nature of that work, revealing that the prospect of aligning reading instruction to "the science" is far more complicated than simply ensuring that schools and districts comply with state-mandated requirements about teacher training and curriculum selection.

The logic model of SOR reform implies that two inputs–improved teacher training and the use of evidence-based curriculum–will automatically produce the desired output, reading instruction that is adequately informed by science. The liminal space between the state-required input and the assumed output is where teachers find themselves, and it is more fraught than policy makers might realize. To illuminate false assumptions in the logic model of SOR reform and to ground this dissertation, I draw on insights from three theoretical traditions: post structuralism, critical perspectives on policy, and practitioner inquiry.

Poststructural Lenses on Power, Knowledge, and the Subject

In this conceptual framework, I submit that SOR legislation is premised on a flawed assumption that reading instruction will automatically change if all districts, schools, and classrooms simply follow state-issued requirements. Poststructuralism sheds light on why a

policy intervention cannot immediately produce its desired effects through a straight line of causality. The reason why the problem-solution approach is false, as post structuralist theories illustrate, is that power is constantly circulating through language, discourse, and social practices to objectify humans into subjects (Foucault, 1982). In that sense, what is important about policies like the READ Act is not just what they try to get teachers to do, but also how they function to shape the ways teachers think, talk, and behave. Indeed, Foucault (1982) urges the study of power not because it is possible to catalog, judge, or classify power but because post structural theories can elucidate the ways in which power subjectivizes human beings. That subjectivizing process occurs through a "form of power which subjugates and makes subject to" (Foucault, 1982). In other words, the individual comes to understand who they are as a human subject in part by being subjected to larger, external forces that are synonymous with some objective, unquestionable Truth, and by producing subjective, internal knowledge of the self.

Through key concepts of power, the subject, and knowledge, post structuralism helps illuminate the power-laden processes by which human beings are made into subjects, processes which occur constantly in schools and, more specifically and relevant to my study, in the rhetoric about the SOR. One of the primary means of subjectification is what Foucault (1982) calls "dividing practices" that divide up parts of the self or others through the construction and maintenance of binaries. One such binary is the division between rational and irrational, produced through discourses about reason that make some ideas sayable and knowable while silencing others (St. Pierre, 2000). A post structural lens brings into focus the historical and cultural contingency of reason, revealing that it is far from an absolute or objective truth even though it often becomes bound up in grand narratives to reify certain discourses, practices, and values as "just the way things are." Such narratives pervade the daily life of schools and the

professional trajectories of teachers as they confront and navigate power-laden expectations about how things are and should be. The call from post structural theory is to analyze dividing practices, the binaries through which humans come to know themselves and others, and to "work to make intelligible the assumptions – the common sense – that allows such binar[ies] to exist" (St. Pierre, 2000, p. 12). In any post structuralist analysis, including mine, the point is not to "expose the hidden truth" of norms about a category like professional learning, but to "trouble that which is taken as stable, unquestionable truth" (Davies & Gannon, 2005, p. 314). Thus, a central post structuralist aim is to break apart the concept of a supposedly unassailable truth. This objective is especially vital in an era of reading reform whose rhetoric so emphatically centralizes the scientific method, evidence, and accompanying assumptions of objectivity and rationality.

If breaking apart seemingly unassailable truth is *what* post structuralism encourages, *how* should research be designed to make that possible? Next, I discuss a number of examples of how researchers utilize post structuralist theories to study questions of interest and how such theories open possibilities for richer, more nuanced investigations by centralizing language, discourse, power, and the self. To articulate the value of a post structural ontological approach in their study of teacher identity and its intersections with assumptions about gender, O' Keeffe & Skerritt (2021) explain, "poststructural tools help researchers avoid 'being seduced' by a desire to create interesting and concise narratives bound by the limitations of themes and patterns in research" (p. 182). A post structuralist theoretical orientation grounds researchers in a view of their data, participants, and project that constantly turns the gaze toward power and subjectification, that strives to trouble universal truth claims, and that, in the words of Lather (2007) makes us "suspicious" of "voices as some innocent uncomplicated story" (p. 27).

As many post structural analyses illustrate, applying this kind of "suspicion" can involve turning attention toward taken for granted language, language practices, and discourses in order to shed light on the structures and binaries they uphold (Johnson, 1989). In outlining a post structural theory of ideology, Leonardo (2003) explains language's special role in subjectivizing humans and reproducing power structures: "it is in language where human subjects understand their relationship to relations of power" (p. 205). Zembylas (2005) echoes this idea, using Foucault's (1980) genealogy method to analyze emotion in the construction of teacher identity by positioning emotions as discursive practices with constitutive effects. Zembylas (2005) shows that teacher identity is not a private affair built independently and freely by a rational subject but is created in and through the language and social practices that make some emotions permissible, and others prohibited.

This is a valuable example of the post structural concept of subjectification and how to study it: a teacher comes to know themselves through a field of allowable emotions that have been structured by power and naturalized by discourse. By analyzing those allowable emotions, how they work through language, and what they do to teachers' subjectivities, it becomes possible to analyze power. Indeed, as Jackson & Mazzei (2011) emphasize, the focus in post structural analysis is not the origin of power, but its effects and its function, the way it pervades language, social relations, and cultural practices to shape people's knowledge of themselves, of others, and of the world. The post structuralist call to tune into the effects of power is one I heeded in my design and approach to working with in-service teachers as they confront high-stakes narratives about reading instruction, effective teaching, and scientific evidence.

A number of additional studies have formatively illustrated for me what it means to ask questions grounded in post structuralism, questions that do not merely seek to name what is

occurring in terms of language, language practices, or social interactions but to unearth how language, language, practices, and social interactions are functioning in relation to constantly circulating power relations. In a particularly resonant article, Freie and Eppley (2014) use Foucault's tools for analyzing power to excavate and trouble assumptions about how "best practices" are presumed to be neutral and transferable regardless of social or cultural context. They accomplish this purpose by analyzing interviews with a principal and other stakeholders in a rural community whose school is on the precipice of being reopened as a charter school. By employing post structuralist concepts including disciplinary power and practice, hierarchical observation, and normalizing judgments, Freie and Eppley (2014) examine nuanced relationships that are structured by power and resistance. These relationships are under constant development and negotiation, thus constituting complex realities for individuals and institutions, realities that the authors argue cannot be glossed over by unilaterally relying on decontextualized practices deemed to be "best." Though it was made almost ten years ago, this argument has special salience in the context of current reading reform: it is important now, as it was then, to attend to how policy efforts to transform reading instruction come to life in particular schools and districts and how policy mandates interact with the kinds of subjectivizing phenomena that exist within those contexts.

Another example comes from how Dutro and Cartun (2016) utilize post structural theories of discourse and affect to "viscerally disrupt" binaries in teacher education, charting a path away from dichotomized ways of thinking about of what counts as effective teaching. Poststructuralism is one of the vehicles that makes possible that kind of visceral disruption, for it brings into focus the reality that children and teachers are "too often named through categories that pre-exist them" (Dutro and Cartun, 2016, p. 120), and that we have to, on purpose, resist our

inclination to rely on and reify those categories as truth. As Dutro and Cartun (2016) elucidate, resisting that inclination can happen through a process they call "un-naming," which is an important practice because "power and the moves of teaching are always fused and function to consequentially position both novice teachers and, most importantly, children" (p. 121). Thus, in directing attention to how power works through language to uphold taken-for-granted truths like the binary between effective and ineffective teaching, post structuralist tools can also illuminate what resistance is or might entail: in this case, to resist means to think twice about the brightly drawn lines that separate the "core" practices of good teaching and everything else.

In a related but slightly different elaboration on resistance, Kumashiro (2001) brings theoretical concepts from post structuralism to bear on anti-oppressive education. A single example from that discussion helpfully illustrates what resistance can mean. Speaking of writing instruction, Kumashiro (2001) illustrates how the norms and conventions that comprise the category of "good academic writing" work to make students into subjects and separate "good writing" from all other types of writing and all other purposes for writing. Pushing back against that category, "good academic writing," and what it does to students and teachers, does not involve altogether eschewing a genre like formal essay writing, but entails asking questions like:

> Can we imagine an assignment where teachers ask students to write in ways that trouble the already-familiar stories?…. And, can we imagine an assignment where students are helped to resist repeating their and their teachers' knowledges, identities, and practices, and to engage in the discomforting process of resignifying knowledges, identities, and practices? (Kumashiro, 2001, p. 9)

Resistance, then, means confronting a category like "good academic writing," grappling with how it is reified as truth by power relations, discourse, and language, and then imagining ways to assert that the category itself, including how it is divided from everything else, does not necessarily represent unquestionable truth. Because there are so many categories, binaries, and

concepts that become reified as truth, as "just the way things are," there are also many ways of resisting. In the words of St. Pierre (2000), "there are a multiplicity of resistances, just as there are a multiplicity of relations of power" (p. 16). By mounting an inquiry into the contextual nuances of a particular place, EBE, my dissertation study seeks to shed light on a range of larger phenomena involving power and resistance, teacher agency, and the binaries about teacher practice and reading instruction that so often take hold in schools.

For me, leveraging insights from post structuralist theories and their use in academic literature means taking seriously longstanding, deeply embedded ideas about teaching, learning, and reading that pre-date SOR policy. These ideas have all been codified into what can feel like singular truths for teachers, "just the way things are." They have been cemented through certain ways of talking about reading, ways of talking about children, and ways of structuring professional learning, which cannot be reset or undone with a new set of mandates or a new vision of what "good" teaching is. Teachers' subjectivities have been shaped by the circulation of power in schools long before the recent raft of reforms in the SOR movement and will continue to be shaped as districts comply with contemporary reading policy mandates. Thus, to support and study teacher learning in an era of the SOR, I must reckon with more than what such mandates *say*; rather, my goal was to also excavate what the policy landscape *does*, how it functions through language practices and discourse to structure teachers' thinking and subjectivity. Doing so held one key for meaningfully and responsively collaborating with teachers in the PD partnership and for framing each of the three articles that comprise this dissertation, especially Article 2 in Chapter Five.

Critical Perspectives on Policy

Post structuralist concepts of power and subjectification suggest that the kind of change envisioned by SOR legislation is a more multifaceted prospect than simply expecting universal results to be produced by policy mandates and required trainings. Perspectives on policy from critical theory make an aligned contribution to my conceptual framework. Two specific insights from critical policy scholarship complicate the assumption that significant pedagogical change can be catalyzed by state-issued requirements about reading instruction: (a) the political nature of education policy and (b) the complexity of local implementation. My day-to-day work with teachers, as well as my analysis of our collaborations, was grounded in these insights.

The political nature of education policy

Dialogue related to the SOR often involves applying findings from empirical research regarding the best way to teach children to read. Therefore, arguments made by proponents of the SOR extend to all who have an impact on the instruction children receive: teachers, parents, teacher educators, school and district leaders, and policymakers. Where policymaking is concerned, it would follow that the relationship between policy and reading research should be close and connected in order for well-supported practices to reach children. However, I understand educational policymaking, and its relationship to research, to be a political and not a rational activity, which means that enacting effective policy is not as simple as applying objective research findings to guarantee positive results (Allington, 1999). This does not mean that literacy policies follow trends in partisan politics, but rather that translating research into policy recommendations is far from a seamless or automatic process. More than two decades ago, Allington (1999) demonstrated these complexities in the interplay between research and

policymaking by providing examples of topics with broad research consensus that nonetheless did not correlate consistently with state policy decisions.

Allington's (1999) findings in that study pertain to the current reading reform landscape because, as he elucidates, policy must be interpreted, and different actors tend to interpret information differently based on their positions, perspectives, and motivations. Policy is a tool for action and an important way to move research findings into practice, but political strategizing is also a key part of making policy, as various groups and stakeholders mobilize to shape policy by elevating their specific version of what a problem is, why it exists, and the best way to solve it. Driving such political strategizing are distinct agendas, values, and conceptions of the purpose of education (Allington, 1999; Roller & Long, 2001). Studying teacher learning in an era of SOR reform requires that I never lose sight of the political dimensions of reading policy, for all educational policy invokes certain ideas and expectations about education that are far from neutral.

The complexity of local implementation

While the translation of reading research into policy is one area of state and local legislation analysis, the translation of policy implementation at the local level is another. Spillane (2004) critiqued the assumption that local actors, such as school district officials, directly enact the text of a policy by simply deciding whether or not to abide by policymakers' directives. Instead, Spillane (2004) argues that local actors interpret laws and mandates through a process of interactive policymaking: "To decide whether to ignore, alter, or adopt policy makers' recommendations, local officials must construct an understanding of the policy message" (Spillane, 2004, p. 6). Local actors use multiple sources of information to make decisions about educational practice, and the text of state policy is only one of these sources. To understand how

a policy leads to change, we must understand what those most connected to policy implementation–i.e., district officials and teachers (like those at EBE)–think the policy means (Spillane, 2002).

Echoing the role of local sensemaking in policy implementation, Woulfin and Gabriel (2022) likened reading reform, especially in the age of the SOR, to a telephone game in which individuals at federal, district, and state levels enact policy by (a) interpreting the messages from the legislation and from leaders' framing of the policy, (b) strategizing about how to make change using resources or people, and (c) beginning to facilitate change. My theoretical approach builds from this insight that implementing policy involves a process of interaction between state-level mandates and individual districts, schools, leaders, and teachers as they construct an understanding of what the policy means for them, drawing on much more than the policy itself. Indeed, we can view all who interpret and implement policies as policy makers (Spillane, 2004). Thus, the sensemaking engaged by teachers, instructional leaders, and administrators is just as consequential for actualizing the objectives of a policy like the READ Act as the contents of policy documents. My study is well positioned to shed light on such sensemaking by focusing inquiry on teachers, administrators, and how they envision and go about implementing SOR policy in the context of their school, classrooms, and community.

Theories of Teacher Learning and Practitioner Inquiry

The final layer of my conceptual framework draws on theories of teacher learning from practitioner inquiry. Like critical perspectives on policy and the lenses on power, knowledge, and subjectification offered by post structuralism, these theories reveal the flawed assumptions in any logic model that sees significant instructional change as the automatic, seamless product of policy mandates. Indeed, such a linear and top-down approach to policy and its impact on

teaching and learning in classrooms is anathema to some practitioner-centered theories of teacher learning. In particular, these theories of teacher learning explain what it means for teachers to learn in ways that change their practice and, as a result, demonstrate why there is much more complexity inherent in practice-shifting professional learning than the successful completion of a state-required training or state-mandated changes to curriculum.

Ways of Conceptualizing Teacher Learning

To articulate how theories of teacher learning informed my study, I begin with three distinct conceptualizations of teacher learning advanced by Cochran-Smith and Lytle (1999), a framework that I applied throughout this dissertation, especially in the second article (Chapter Five). Each concept is distinguishable not necessarily in terms of the methods it uses to elicit teacher learning, but in terms of the picture it paints about what it means for teachers to "know more" (i.e., knowledge) and "teach better" (i.e., practice) (Cochran-Smith & Lytle, 1999, p. 249). The first conceptualization, called *knowledge-for-practice*, assumes that there is a "formal knowledge base" about how to teach well that is produced through traditional scientific methods and must be made accessible to teachers through pre-service teacher education and in-service PD that is offered or mandated at a remove from teachers' practice (Cochran-Smith & Lytle, 1999). In contrast, the second conceptualization of teacher learning, *knowledge in practice*, assumes that what teachers need to know to teach well can be located within exemplary teaching practice, and that teachers learn by studying the actions and decisions of expert educators and then applying those approaches to their own practice. The third conceptualization, *knowledge-of-practice* suggests that the knowledge needed to teach well comes from teachers themselves when they conduct collective, systematic inquiries not just into the everyday work of teaching but also into

larger social and political structures that shape what it means to teach and learn, with the goal of facilitating meaningful change in schools, programs, and classrooms.

Despite its age, Cochran-Smith and Lytle's (1999) book chapter compellingly attests to the consequences of how we conceptualize what it means for teachers to learn: the differences between such conceptualizations represent important and distinct answers to theoretical questions about what knowledge is, how it is acquired, and how it relates to practice. One such difference in what it means for teachers to make meaningful shifts to their practice exists in the view of teacher learning implied by contemporary reading policy, compared to the premises about professional learning that ground my collaborations with teachers. The teacher training requirements that are part of SOR reform in the state in which my study is located are reflective of a knowledge-for-practice conceptualization of teacher learning because the assumption is that teachers learn when they are granted access to a scientific, formal knowledge base about what it means to teach reading well. In that model, teaching, then, involves a process of "applying received knowledge to a practical situation" (Cochran-Smith and Lytle, 1999, p. 257), or in this case, translating the formal content of the READ Act training into the everyday activities of a classroom. Yet in a local context like EBE, there can be complexities within the knowledge-for-practice paradigm, some of which I describe in Chapter Five, related to my research question about how PD, curriculum, and leadership functioned in the school's path toward instructional improvement.

Insights from Practitioner Inquiry

Cochran-Smith and Lytle's (1999) conceptualizations of teacher learning proved to be vital tools for analysis, while the field of practitioner inquiry provided crucial insights for how to approach my collaboration and inquiry with teachers. As Cochran-Smith & Lytle (2009) explain

in their book, *Inquiry as Stance: Practitioner Research in the Next Generation,* the first step is appreciating that the overarching purpose of practitioner inquiry is not to quality control teaching practices or bolster test scores, but to "generat[e] deeper understandings of how students learn—from the perspective of those who do the work" (Cochran-Smith and Lytle, 2009, p. 22).

A few studies serve as illustrative examples for how to actualize this purpose of practitioner inquiry around generating deeper understandings of how students learn. As Butler and Schnellert (2012) show, moving toward that purpose can involve adopting frameworks of inquiry and sociocultural and socio-constructivist theories that see learning as occurring through iterative, collaborative cycles in which teachers define problems, plan action, and reflect to make context-specific classroom decisions. Embracing that purpose may also involve beginning with the stance that guided van Schaik et al. (2019) in their work on teacher learning groups, which centered the idea that teachers learn when they integrate multiple types of knowledge, including personal knowledge, practical knowledge, and knowledge from education research. In addition, taking up that approach could involve purposefully interrupting traditional paradigms in teacher learning that dichotomize roles of the performer and the spectator, as Ghousseini et al. (2022) did in breaking the "fourth wall" of teacher collaboration to pave the way for collaborative learning through collective problem-solving within shared enactments of classroom practice. Each of these examples provides an illustration of how to live out the basic theoretical precept of practitioner inquiry that teachers themselves hold the key for co-creating knowledge, deepening their practice, and driving reflective conversations.

As outlined in this chapter, my conceptual framework consists of three, interlocking theoretical lenses. Together, they frame the commitments and perspectives I brought to my collaborations with in-service elementary teachers at EBE across four years of partnership, as

well as my analysis of those collaborations. These lenses also collectively and individually speak to the incompleteness of the logic model implied by SOR legislation, which suggests that policy mandates about teacher training and curriculum selection will automatically transform elementary reading education. First, post structuralist lenses on power, knowledge, and the subject reveal that the prospect of growing teacher practice and transforming reading education cannot be divorced from the language, language practices, and discourses that work to shape teachers' subjectivities in schools. To change the way teachers teach must also involve attending to the "dividing practices" (Foucault, 1982) through which power circulates to create and maintain binaries, separating categories of "good" or "evidence-based" teaching from everything else. Theoretical tools from post structuralism were deeply valuable to my dissertation study because they grounded me in a rejection of the teacher-as-technician model; they helped me see that a partnership devoted to teacher professional learning is not just about producing changes to teachers' teaching methods. It also had to be about understanding how teachers are confronted by and can find resistance within the power relations, discursive practices, and binary categories that pervade schools and shape teachers' subjectivity, their knowledge of themselves.

Next, as demonstrated by critical perspectives on policy, there are always political dimensions in policy, so implementing policies like the READ Act is never neutral. Instead, making and implementing policy involves two important, ideological processes: (1) strategizing to elevate some understanding of a policy problem (such as reading achievement), its attendant solution, as well as larger goals, agendas, and power relationships (Allington, 1999; Cochran-Smith, 2021), and (2) sensemaking on the part of local actors like principals, instructional coaches, and teachers who interpret what a policy means for them and their work (Spillaine, 2004; Gabriel and Woulfin, 2022). These critical reminders about what policy is and what it

involves allowed me to have conversations with my teacher and administrator colleagues about the READ Act without ever losing sight of some potentially unspoken aspects of Colorado (and other) reading legislation, helping me remember that the ramifications of such policies reach far beyond the text of the mandates themselves. Specifically, a critical approach to policy and policy implementation helped me turn my gaze toward the interests, agendas, and ideologies that are sometimes covertly evoked in rhetoric about the SOR and reading reform, which all have important consequences for how teachers learn and approach their work with children.

Finally, from practitioner inquiry, I drew a key conceptual stand, namely that professional learning that positions teachers as having the capacity to generate valuable knowledge about how students learn is most likely to lead to meaningful shifts in practice. Across multiple years of partnership work, I have adopted an approach to working with teachers that views teachers themselves as capable of theorizing their own classroom practice, generating new knowledge, and grappling with dilemmas within classrooms, schools, and societies (Cochran-Smith & Lytle, 1999).

Review of Literature

The purpose of my dissertation study has been to learn about how school administrators, in-service teachers, and university-based literacy researchers collaborate to design and deliver school-embedded professional learning in an era of the SOR. To pursue that objective, it is essential to situate this study within four larger topics in the research literature: (a) the ways in which teachers negotiate education policy, (b) the connections between contemporary policy mandates and current narratives about teaching, teachers, and reading instruction, (c) what we know about effective, meaningful PD, and (d) why rural schools represent valuable sites for learning about collaborations between teachers, administrators, and researchers. In the following

sections, I examine each of these themes and articulate their salience to my work with teacher and administrator colleagues in rural eastern Colorado.

Trends in Teachers' Negotiation of Policy and Impacts for Instruction

When any kind of education policy is passed, including SOR reading policies, a rich area for inquiry emerges, one that explores how teachers strategize to comply with recently issued requirements while also maintaining their own commitments and vision for their work with children. In this way, studying teachers' negotiation of education policy requires leaning into the fraught position that confronts teachers when questions of who they want to be (i.e., their identity, values, or philosophy), as well as their existing instructional knowledge and practices, come up against what they are supposed to do (i.e., certain ways of teaching required by policy mandates). This tension often plays out when teachers appropriate policy, first interpreting it but then bending it to their own purposes, beliefs, and values.

The literature includes many instructive examples of studies that explore how teachers appropriate education policy, following the historical trajectory of policy from the era of No Child Left Behind (NCLB), through Race to The Top, to more recent reforms in reading education. In one example, the teacher in Stillman and Anderson's (2015) study confronted a great deal of pressure to bolster student performance on standardized tests because of her school's classification as low performing, which prompted efforts by school administrators to emphasize instruction in test-taking strategies and implement a school improvement plan. Amid this test-centric course of action, the teacher leveraged her "ideological clarity" about her students' cultural and linguistic assets to find a way to make her own goals compatible with policy goals around academic achievement and skill remediation (Stillman & Anderson, 2015).

Similarly, the literacy coach in Zoch's (2015) study faced pressure from school and district leadership to narrow the curriculum to assessed skills in order to improve student scores on state reading tests. The literacy coach found ways to reconcile her own values, knowledge, and beliefs about teaching literacy with the test-focused curriculum mandates imposed by the district. In one reconciling strategy, the coach supported teachers in delivering a workshop model during reading instruction that recognized what children bring to reading; in another, she formed inquiry groups for teachers that deliberately resisted the one-time "training" paradigm of PD at the school by positioning teachers as experts and co-learners (Zoch, 2015). The particular forms are slightly different, but what is illustrated in both studies—Zoch (2015) and Stillman & Anderson (2015)—is the resourceful, creative strategizing engaged by teachers to achieve technical compliance with policy mandates while preserving their own deeply held, justice-oriented beliefs about children, teaching, and learning.

Hikida & Taylor (2023) offer a more recent example of the same phenomenon, using ethnographic tools to explore how two focal teachers managed and negotiated administration-issued mandates about high stakes test preparation. They utilized Foucault's concept of a plague-stricken town to highlight similarities between a town gripped by a plague, where overt surveillance is justified to treat the sick and manage the spread of disease, and a school where the same kind of overt surveillance is justified in order to procure the test results needed to quell the ever-present threat of school closure (Hikida & Taylor, 2023). In both cases, institutional power remains largely unchallenged for the sake of an urgently felt goal, thus also making it acceptable to control and surveil individuals. In a school pervaded by pressure from high stakes testing, those technologies for control and surveillance include things like publicly sharing assessment

results or requiring teachers to teach test preparation strategies under the watchful gaze of administrators.

Even under the weight of this kind of institutional control, valorized for its capacity to secure results and create "academic health," the teachers in Hikida & Taylor's (2023) study found ways to push back, ranging from outright resistance to the kind of reframing and reworking of mandates that was employed by educators in Zoch's (2015) and Stillman and Anderson's articles (2015). In one example of such reframing, teachers did indeed comply with administrative requirements to explicitly teach test-taking strategies such as having students annotate paragraphs in a reading passage to help them search for answers to test questions. However, one teacher weaved something crucial into this test-taking instruction: she talked transparently with students about "the test writers," making these creators of the test, and their interests and agendas, visible to the students who were to take the test. As she taught lessons about selecting the best answer on a multiple-choice question, the teacher engaged students in discussion about how the test writers were not necessarily out to gauge students' knowledge, but to "trick" them. As such, the assumption that students were careless and trickable could be challenged by the fourth graders themselves, as they repositioned themselves as more savvy than the test writers gave them credit for (Hikida & Taylor, 2023). This example from recent classroom research provides another compelling illustration of the creative ways in which teachers strategize to comply with what is required of them, while holding fast to what they believe about their own work and their students.

Doing so often involves teachers contriving a path of *both/and* when it comes to policy mandates, a path that makes it possible to satisfy the demands of newly imposed policy requirements while remaining true to their own identities as educators. I turn to one final

example of the *both/and* path from Cassels Johnson and Freeman (2010), who analyzed the emergence of an "egalitarian discourse community" of researchers, administrators, and teachers. Together, they designed a dual language program in ways that empowered teachers to interpret policy, retained an ideological commitment to additive bilingualism, and found creative ways to comply with restrictive federal policies while living out that commitment to additive bilingualism (Johnson & Freeman, 2010). This and other studies of teachers' negotiation of policy emphasize a key idea, one upon which my dissertation is premised: we can gain important insight into the larger U.S. education system by striving to understand teachers' instructional decision making and how that decision making, as well as other reflections on practice, might contain processes for interpreting, negotiating, and reconstructing education policy in ways that are responsive to students' needs and identities and school and community contexts (Menken & García, 2010).

Reading Policy, Calls for PD, and Narratives About Teachers

In this section, I connect three topics that are salient for my inquiry into collaborations with in-service elementary teachers around professional learning and reading instruction. I begin with an overview of SOR policy, then describe current calls for PD in evidence-based reading instruction, and finally summarize the resulting narratives about reading, teachers, and teaching. Understanding the interconnectedness of each of these topics has been key to collaborating with in-service teachers who are confronting a policy context that fiercely advocates for the alignment of instruction with science and is also rife with assumptions about what matters most in teaching and learning to read.

40 states and the District of Columbia (Schwartz, 2024) have passed legislation inspired by the SOR that issues requirements about how teachers are trained to teach reading and the

reading curricula schools are permitted to use. The goal of such legislation is to align classroom practice to the evidence base from the SOR. This contemporary reading policy can be situated within a shift in U.S. education policy that, according to Mehta (2013), was galvanized by the *A Nation At Risk* (1983) report, which prompted the federal government to assume an unprecedented level of control over the education system. Figuring prominently into this new "education policy paradigm" is reading education, especially the process of teaching young children to read. Reading education has a long history as a priority for policymakers, motivating the federally funded Reading First program in the early 2000s, which aimed to "promot[e] instructional practices that have been validated by scientific research" (Institute of Education Sciences (IES), 2008). In the last decade, the policy goal to strengthen U.S. reading education has been imbued with particular fervor, as public conversation about the SOR and reading achievement proliferates in the media. For example, the release of the 2024 NAEP Nation's Report Card ushered in headlines like "Reading Scores Fall to New Low on NAEP, Fueled by Declines for Struggling Students" (Schwartz, 2025), while other news articles have evoked an unfolding battle over the best methods for teaching reading (e.g., Goldstein, 2022).

The SOR, which is at the center of these conversations, can be defined broadly as "a vast, interdisciplinary body of scientifically based research about reading and issues related to reading and writing" (The Reading League, 2022). Contributors to the SOR include cognitive scientists, psychologists, and other researchers who develop theory-based models of reading and empirically test hypotheses about reading through randomized control trials and quasi experimental designs. SOR studies often identify which cognitive skills are relevant to reading without necessarily explaining how or when to teach them (Seidenberg et al., 2020; Jensen, 2021). Yet current reading policy like Colorado's READ Act draws on the SOR to catalyze

significant pedagogical change, assuming that requirements around curriculum and teacher training will "ensure that students educated in the public schools… consistently receive evidence-based instruction that is proven to effectively teach children how to read" (Colorado Department of Education (CDE), 2019). In this way, research from the SOR has been instrumentalized to reform the way teachers are trained and the way reading is taught in U.S. schools. Proponents of such reform hope to achieve congruence between how children are taught to read and how the brain learns to read, according to science.

This kind of clarity about what reading policy aims to do–ensure reading instruction is informed by science–has consequences for current calls for PD and narratives about teachers. Against the backdrop of SOR-inspired reform, one of the most important things for teacher education and PD programs to provide is guidance on how to implement a set of instructional practices corroborated by the research evidence that underlies policy mandates. The Colorado READ Act defines evidence-based practices as "based on reliable, trustworthy, and valid evidence and has demonstrated a record of success in adequately increasing students' reading competency in the areas of phonemic awareness, phonics, vocabulary development, reading fluency, including oral skills, and reading comprehension" (CDE, 2019). Thus, evidence-based practices for teaching reading that adhere to the policy's demands have a clear, specific definition. One consequence of that is the expectation that teacher training, PD, and learning experiences ought to make it possible for teachers to seamlessly integrate such practices into their everyday work. Throughout this dissertation, I maintain that PD should make such integration possible while also centering complexities of context and commitments to the social and cultural textures of literacies.

The agreement between teacher education and the SOR evidence base for teaching reading is presumed to be all the more important because of results like those in Hudson et al.'s (2021) review, which supported the idea that extensive training and support focused on phonemic awareness, phonics, and morphological awareness can improve teachers' knowledge of foundational literacy topics in ways that may be linked to gains in student word-reading outcomes. Moreover, the authors point out that effective educational experiences for pre-service teachers provided opportunities to transfer knowledge of foundational literacy topics with guidance, modeling, and feedback from an expert, rather than a mentor teacher who may or may not be adequately familiar with the SOR (Hudson et al., 2021). Louisa Moats, a central contributor to the International Dyslexia Association's Knowledge and Practice Standards for teachers, has insisted that expert teaching depends on a teachers' knowledge of word-level language structure. This knowledge does not, in her view, receive adequate coverage in most teacher education programs (Moats, 2014). One result of the growing sense that teachers do not know enough of "the science" behind reading is a growing scrutiny directed at teacher preparation programs for their capacity to prepare graduates to know and enact teaching strategies informed by the SOR (Belsha, 2023). Thus, the overwhelming priority in current calls for teacher education and PD programs is alignment between the content of such programs and concepts, such as language structure, phonemic awareness, and phonics, that are considered part of the evidence base in scientific studies of reading.

As reading policy calls for PD whose most important quality is continuity with the evidence base from the SOR, distinct narratives also emerge about what it means to read and what it means to teach. Aukerman and Chambers Schuldt (2021) suggest that the SOR research and policy preoccupation with the question of "what works in service of assessed reading

proficiency" runs the risk of defining reading and reading instruction in a way that neglects a myriad of important capacities of literacy, such as the "textual dexterity" students must possess to "access, understand, use, and scrutinize text for purposes that matter to them" (p. 87). Similarly, Terry (2021) warns against a narrative that positions the perfect implementation of evidence-based practices as a panacea for the "multifaceted" "problem of ensuring educational equity for Black and Brown children" (Terry, 2021, p. 4). Addressing that problem, according to Terry (2021), does involve understanding the factors revealed by science to be associated with reading achievement. Crucially, though, it must also involve understanding the conditions that are conducive to learning for Black and Brown students and adopting a steadfast strengths-based perspective in diverse research and classroom settings. Doing so also requires teachers, teacher educators, school leaders, and other stakeholders in reading reform to recognize that the picture painted by achievement tests suggesting that Black and Brown students do not "read well" is an artifact of an oppressive system working exactly the way it was designed to (Terry, 2021). Terry (2021) and Aukerman and Chambers Schuldt (2021) thus both point to ideas and perspectives that are at risk of being omitted when SOR initiatives myopically focus only on scientific evidence and the type of reading contained in reading assessments.

In a related argument, Jensen (2021) notes SOR's tendency to retain a positivist orientation that is primarily concerned with causal evidence of generalizable practices, dismissing context-specific variation as statistical noise. He urges "methodological pluralism" to put scientific studies of reading into conversation interpretivist-minded reading research whose primary focus is sociocultural complexities and their salience in reading instruction. Yaden et al. (2021) similarly argue that SOR research and policy may be reproducing the nature-nurture binary, aligning itself mostly with the nature side by being concerned primarily with cognitive

and neurobiological topics like brain imaging and eye movement and deeming as distractions the considerations more associated with the nurture side, such as social environment. Articles like these, which excavate the SOR's epistemological affiliations, bring into focus two assumptions about reading implied in and through SOR and SOR-inspired reading policy: first, that the type of reading that matters most is that which can be assessed, and second, that the best way to understand such reading and how to teach it is through empiricist research that eschews any concern with contextual particularities.

These assumptions about reading layer onto narratives about teachers who teach reading. One such narrative, circulated in the media through reports like Emily Hanford's (2018; 2022), suggests a linear, roughly causal relationship in which gaps in teacher educators' knowledge about the SOR create weaknesses in practicing teachers' quality of instruction, which creates poor scores on reading assessments (Wetzel et al., 2020). Narratives that uphold this causal model "position teachers as struggling and have suggested that they are to blame for failing students and are contributing to racial injustice through their reading instruction" (Wetzel et al., 2020, p. 327). Similarly, according to Hoffman et al. (2020), SOR-fueled criticisms of teacher education programs have the effect of silencing teachers rather than inviting them into conversation about how science and scientific evidence and inquiry might be integrated into instruction.

Elaborating during a 2021 Literacy Research Association (2021) panel discussion, Jim Hoffman warned that the association's research agenda around equity and culturally and linguistically sustaining pedagogies is at risk of being stymied by a relentless focus on instructional alignment with the SOR, affording teachers "no degrees of freedom to adapt their teaching in caring for and responding to their students' literacies" (Hoffman et al., 2021). In

their analysis of media reports on the SOR, MacPhee et al. (2021) provide additional insight into how teachers are represented in increasingly prominent public conversations about reading education. Findings from that study illustrated how media portrayals of the SOR mapped salient characteristics of a metaphorical source (war) onto a target (reading) to create the conceptual metaphor that reading is war, with the implication that educators who do not subscribe to SOR-informed practices are enemy combatants. In this way, interactions between the SOR, reading policy, and media coverage of reading education cultivate a pointed narrative about teachers: that they must be knowledgeable about and committed to the SOR, and if they are not, they become arbiters of ineffective methods for teaching reading that doom U.S. public schools to continued underperformance in reading. Elements of this narrative form the contours of the policy landscape in Colorado and shape the local context of EBE, where I have partnered with teachers and administrators to deliver professional learning. In order to understand my collaborations with partners, it is key to appreciate how policy mandates and the media are working to tell a distinctive story about reading, who teaches it, and how it should be taught.

What we know about effective, meaningful professional development

An additional area of the literature to consult is what we know about effective, meaningful professional learning and development for teachers, a knowledge base that extends across disciplines and content areas. For example, in Penuel et al.'s (2007) influential and aptly titled article, “What makes PD effective?”, the authors helpfully distinguish between traditional and reform-oriented PD. Each of these types of PD differ in terms of the activities they involve, with traditional PD tending to involve one-time workshops or training, and reform-oriented PD enlisting things like coaching, mentorship, study groups, and internships. However, as Penuel et al. (2007) explain, the key distinction between traditional and reform-oriented PD is the design

of the PD, especially in terms of its proximity to practice. One such design, intended to strike particular proximity to practice, is what Penuel et al. (2007) call "site-based professional development," or what I also call school-embedded professional learning. Referenced with either term, this kind of PD "provides assistance at school, in the context of teachers' enactment" (Penuel et al., 2007, p. 928), rather than, for example, delivering asynchronous training online, removed from actual classrooms.

The field of Practice-Based Teacher Education (PBTE) sheds additional light on site-based professional development that is proximal to practice, clarifying the central concepts of pedagogical dilemmas, pedagogical reasoning, and pedagogies of reasoning. The beginning premise is that teaching itself consists of a steady stream of *pedagogical dilemmas*, problems that arise and necessitate some kind of response from the teacher, even though there is no self-evident correct or incorrect path to take (Gibbons et al., 2017; Gotwalt, 2023). To grapple with these problems, teachers engage what Shulman (1987) Shulman termed *pedagogical reasoning*, or the "process by which teachers engage relevant knowledge in response to pedagogical dilemmas in order to achieve instructional goals" (Gotwalt, 2023, p. 2). In Practice-Based Teacher Education, there are approaches to working with teachers that aim to support teachers in pedagogical reasoning. The purpose of such support is two-fold: to promote the activation of professional knowledge to respond to pedagogical dilemmas in ways that further some kind of instructional purpose, while also situating reasoning processes within the richness of a classroom context, including students' identities and teachers' knowledge of them as learners.

Some researchers (Gotwalt, 2023; Kavanagh et al., 2020) have described these approaches as *pedagogies of enactment* and *pedagogies of reasoning*, ways of working with teachers around their decision making that can include practices like the six identified by

Kavanagh et al. (2020): "posing pedagogical dilemmas, highlighting instructional purposes, engaging relevant knowledge, considering multiple instructional decisions, and making instructional decision-making explicit." In sum, Penuel et al.'s (2007) foundational work clarifies that one characteristic of effective PD is its proximity to practice, and these insights from Practice-Based Teacher Education further elucidate that practice-proximal PD is meaningful when it supports teachers' reasoning about the myriad of pedagogical quandaries teachers face each day.

Rural schools as opportunities to build understandings of professional learning

My review of the literature inspires me to submit a final argument, namely that studying school-embedded professional learning in rural contexts is particularly important because it represents a valuable opportunity to build the field's understanding of meaningful collaborations with in-service teachers. There are two main reasons I assert this view of rural schools, which I elaborate further in the third article in Chapter 6: first, the particularities of what it means for teachers and students to learn in rural settings; and second, the ways in which attending to student needs in rural contexts might further equity aims in an era of top-down reading policy.

The benefit provided by boundary-blurring, practice-focused collaborative learning is especially salient for teachers in rural districts where geographic distance and resource constraints make it difficult to create teacher-driven, long-term PD experiences. Compared to teachers in urban and suburban schools, rural teachers have been found to experience reduced access to professional learning opportunities (Erickson et al., 2012). Additionally, research indicates that many children and families living in rural areas experience inadequate access to employment and healthcare, as well as other economic challenges and structural inequities that impact achievement on the high stakes assessments used to measure success in school literacies

(Vernon-Feagans et al., 2018). Given current reading policy in Colorado that can valorize achievement-focused teaching methods that are decontextualized from the individual and community knowledge students bring from their lives to their school literacies, professional development that is deeply situated and responsive to local goals and needs is all the more important. This need for close, responsive PD guided all phases of building and studying the partnership with EBE teachers, from the earliest stages of brainstorming and grant writing to more recent research activities and data analysis.

The second theme in my assertion about the value of learning with rural educators involves the idea that doing so can provide key insight into how to remain committed to equity while navigating state-issued policy mandates. One way of living out that commitment to equity through the partnership is beginning with the idea that the teachers at EBE are knowledgeable about their own classrooms and school community. Seeing the school and teachers from a strength-based perspective is particularly important given the historical trend in rural education research to view rurality as anti-modern, thus motivating a research agenda that focused on ways to achieve parity between rural schools and urban schools (Biddle & Azano, 2016). Vestiges of this perspective persist today as researchers who study rural schools risk casting the challenges rural schools face as unsolvable problems compositional to rurality itself (Biddle & Azano, 2016). Throughout my collaborations with rural educators across four years of partnership, I have strived to honor their professional knowledge and lived experience in order to resist the long-standing penchant in rural education research to view rural schools through a deficit lens.

Additionally, my hope for analysis of the partnership at EBE is that it sheds light on what Jensen (2021) called the "science of teaching reading equitably," or teaching in ways that are "effective in assisting student reading performance and meaningful in terms of integrating

values, practices, and identities of minoritized students' everyday lives" (p. 69). In rural schools, I contend, it is possible to start learning about how to make reading instruction both effective and meaningful, by triangulating knowledge about "best practices," which should work for all students, with knowledge about place and the types of practices that will serve particular students in particular classrooms in particular communities.

Eppley et al. (2018) elaborate, suggesting that alongside evidence-based practices, which rely on experimental designs to ensure the generalizability of findings, there must also be room for practice-based evidence, or context-specific, in-the-moment data about students and classrooms, with no expectation that one intervention will produce universal outcomes across time and space. In coordinating evidence about how all children learn to read with evidence about how children in a given context learn to read, a possibility emerges to reframe the rural context, not as an impediment to implementing science-based instructional practices, but as an opportunity to learn more about those practices and how they work (Eppley et al., 2018). Brenner et al. (2021) even suggest that a promising strategy for retaining rural teachers involves empowering them to learn about local assets and needs to adapt evidence-based recommendations for use in the rural classroom. Teaching the science of reading equitably is both generally effective and individually meaningful (Jensen, 2021), and I maintain that we can learn about how to do both in rural schools like EBE.

The insights and ideas from these fields and bodies of literature fueled me in creating a vision for collaborating with elementary teachers in EBE, one that centers their knowledge and recognizes the value of attending to local context. In the next chapter, I describe the methodological lenses and tools I engaged to actualize and refine this vision in my work with my teacher and administrator colleagues at EBE.

Chapter Three: Methodology

My purpose in this dissertation study is to learn about how in-service elementary teachers and university-based literacy researchers might collaborate to foster teacher learning and make instruction more responsive to student needs in an era of the SOR. As discussed in previous sections, this inquiry aims to contribute to the equitable teaching of reading by centering teachers and their knowledge to encourage complementarity between what the field knows about evidence-based practices for reading instruction, what a teacher knows about their own students and school context, and what we can discover together about how to hold fast to commitments to humanize children as they learn. Along with my teacher partners, I conceptualized humanizing children as they learn as seeing them as multidimensional human beings for whom learning to read could be lively, vibrant, and joyful, and not merely a matter of passively receiving decontextualized, discrete skills. Choices about methodology–how I approach my research questions, data collection, and data analysis–allowed me to remain steadfastly committed to these aims throughout the course of the study. To that end, in this section, I consult the literature on research practice partnerships (RPPs), along with practitioner inquiry, as twin methodological lenses. Together, their focus on mutualistic collaborations across institutional or other boundaries proved to be particularly well aligned to my objectives in this study. Before turning to the EBE context, study participants, and my positionality, I also share some reflections on generalizability and the value of digging deeply into EBE as a local context and research partnership site.

RPPs, defined as "long-term, mutualistic collaborations between practitioners and researchers that are intentionally organized to investigate problems of practice and solutions for improving district outcomes" (Coburn et al., 2013, p. 2), have three features that make them

particularly valuable for collaborations with teachers in an era of SOR reform (as I will also discuss in my articles, particularly Article 3). Those features include: (a) opposing a translational view of policy and change, (b) defining knowledge as multidirectional, and (c) focusing on process, boundary crossing, and collaboration as sites of learning. The first key feature is RPPs' intentional rejection of the notion that educational change happens by simply translating big ideas from research or policy into practice in districts or classrooms. Deepening the definition, Penuel et al. (2015) explain that RPPs provide a way of resisting what they call "the translation metaphor," the assumption that education research singularly identifies effective interventions that must be "translated" to teachers who implement them in ways that are accessible to any and all students. This logic fails to provide generative ways of understanding the complex connections between education research and practice and any role research might play in educational improvement, thus necessitating an "alternate conceptual framework that more adequately accounts for the complex and difficult challenges researchers and practitioners face together" (Penuel et al., 2015, p. 183). RPPs provide such a conceptual framework because they, by definition, reject the idea that connecting research and practice involves a one-way transmission of knowledge. Practitioner research likewise emphasizes how teachers work individually and collectively through iterative cycles of collaboration to define problems, plan action, and reflect to make context-specific classroom decisions (Butler and Schnellert, 2012).

RPPs suggest that the most important thing to understand is the often-messy processes engaged by researchers and practitioners as they collaborate to mutualistically learn what research might mean for practice and what practice might mean for research (Penuel et al., 2015). RPPs thus make it possible to oppose a view of teachers as technicians who passively receive formal knowledge from a research base, a perspective that is all the more necessary as

SOR legislation issues requirements about one-time training for teachers in science-based instruction. To take an approach indexed by RPPs is to insist that knowledge flows in a multi-directional path between researchers and practitioners when partnerships are based on reciprocity and shared ownership of problems (Penuel et al., 2015). This view of knowledge is part of the premise of RPPs, and it is deeply compatible with my objectives to (a) design meaningful, school-embedded PD that centers teachers, their practice, and their goals and (b) find agreement between the call to comprehensively implement evidence-based practices and the imperative to attend to local classroom and community contexts. Rather than privileging one type of knowledge, such as scientific studies of reading that might be the purview of university-based researchers and academics, RPPs insist that what researchers know and want to learn must be held side-by-side with what practitioners know and want to learn. Important and profound on its own, this principle also resonates with the goal of practitioner inquiry to "generat[e] deeper understandings of how students learn—from the perspective of those who do the work" (Cochran-Smith and Lytle, 2009, p. 22)

A final feature of the methodological approaches typical to RPPs, which I contend are essential in the present evidence-focused policy context around reading instruction, is their intentional focus on processes, interactions, boundary crossing, and collaboration as sites of learning. RPPs' conceptualization of knowledge directs attention to the collaborative processes between partners with different institutional affiliations, contending that it is through such processes that the most transformative action and learning occurs. Understanding those processes means illuminating practices and relational activities that do not always receive attention in education research, which opens the possibility for methodologies, like participatory design

research (PDR), that critique normative hierarchies of power while remaining committed to being impactful in the present (Bang and Vossoughi, 2016).

The process-focused approach of RPPs also centralizes the concept of boundary crossing, the idea that cultural and institutional differences between people (e.g., the sense of urgency felt by district leaders versus the slow pace of evidence-focused researchers) become salient when they collaborate (Penuel et al., 2015). If understanding boundary crossing is key to understanding collaboration, researchers must approach the perceived boundaries between institutional sites, however fraught they may be, with curiosity and openness (Penuel et al., 2015). Bringing curiosity and openness to the clashes that occur at boundaries is desperately necessary in a reading policy climate brimming with binaries, ready to classify people, programs, and schools into high-stakes, sharply defined, monolithic categories of effective versus ineffective, research-based or debunked. At a time when teachers and teaching tend to be judged according to a singular construct, their alignment to "the science," RPPs urge a dialogic perspective that holds that the formal knowledge base can be deepened by taking practice seriously and vice-versa. In doing so, RPPs also find a methodological compatibility with both/and definition of an equitable SOR, one that makes room for reading instruction to be effective in teaching the skills most predictive of school success and meaningful in connecting to children's lived experiences, identities, and literacies. I have conceptualized this dissertation as a study of an RPP because I see RPPs as tools for equity in an era of the SOR and as an approach to education research that holds great potential for centering the experience, expertise, and knowledge of teachers.

Finally, the methodology in this dissertation involves the principle that there is inherent value in deeply understanding the particularities of an individual educational site, EBE, without

necessarily expecting that what happens at EBE can be extrapolated or generalized to sites outside EBE. As I will describe in a later section on methods and processes for data collection, I sustained a consistent presence on site at EBE over multiple years of the partnership, using ethnographic and other tools to get to know the school, the community, the teachers, and the students on an intimate level, in ways that would allow me to explore my three research questions. Importantly, the reason for this immersion in the school was never to reach definitive conclusions about EBE's implementation of SOR policy or to suggest that similar implementation journeys are happening at other schools, rural or otherwise. By the same token, my purpose in spending so much time in classrooms teaching alongside my teacher partners was never to standardize classroom practice or imply that certain teaching methods will work everywhere, since it is well documented that any given teaching approach may work in one context but not another (De La Luz Reyes, 1992; Dyson, 1993; Dyson & Genishi, 2005). Rather, in the design and analysis of this dissertation study I have focused methodological attention on the interactions and interpretive frames engaged by teachers as they make sense of their own literacy teaching against an intensive policy backdrop, all in order to understand everyday teaching and learning as the "complex social happenings" they are (Dyson & Genishi, 2005). Given this larger methodological goal of the dissertation, I have utilized "particular methods of observation and analysis to understand *others'* understandings (their sense of what's happening, and therefore, what's relevant) and the processes through which they enact language and literacy education" (Dyson & Genishi, 2005, p. 12).

Context, participants, and researcher positionality

EBE is in an eastern Colorado town of 3,013 residents, located about 60 miles east of my university campus. On each of my trips there, I have noticed an abundance of construction

vehicles and signs advertising newly constructed homes for sale, and my teacher and administrator colleagues have frequently described the ongoing growth in the area, as the town increasingly becomes a bedroom community of a nearby major metropolitan city, with many families and EBE teachers commuting between the city and the town where EBE is located. According to reporting from Colorado Public Radio, the town's population has almost doubled since 2000, causing trepidation for some long-time residents who are wary of the challenges brought by rapid growth (local public radio reporting (blinded to preserve anonymity), 2018).

To understand the context of the school and community, it is also helpful to consider some demographic information about my teacher and administrator colleagues at the school and the student population. The principal and four second-grade teachers who volunteered to participate in the research component of PD partnership are women, the assistant principal is a man, and the group varies in age and racial identities. My partners' experiences range from a teacher entering her third year to teachers with more than 20 years in the classroom. Kay, the second-grade level lead, held an additional districtwide role, coordinating Gifted and Talented services for elementary, middle, and high school students. She had the most years of experience and had been teaching at EBE for the majority of her twenty years in the classroom after completing a traditional teacher education program in the state. April had eleven years of experience and, like everyone on the second-grade team except for Kay, came to teaching as a second career, beginning as a paraprofessional in a neighboring school district before working toward licensure and eventually earning a Masters. Sophie was in her fourth year of teaching and had also taken an alternate path to certification while filling a paraprofessional role in another rural school district before moving to EBE when her husband's job brought her to the area. Theresa, the final second-grade teacher, was in her first year of teaching after a career in

the dental field and then spending a number of years serving as a special education paraprofessional at the district high school. She had two children enrolled at EBE and was particularly eager for collaboration, offering up her classroom as a home base for me during my day-long visits to the school. I feel incredibly fortunate to have built relationships with these four teachers since 2021, and I consider each of them close personal friends in addition to professional collaborators.

A final piece of context about EBE involves how much change the school has seen since the research team began visiting in 2021. At that time, the principal role was filled in an interim capacity by the person who usually served as a middle school principal, and the district superintendent was preparing for retirement. The 2022-2023 school year brought a new principal and assistant principal to EBE, as well as a new superintendent. In an additional unexpected turn, the first day of school was delayed by almost two weeks because construction to EBE's new building took longer than anticipated. There were more personnel changes in the following two school years, including a new assistant principal in 2023-2024 and a new principal and superintendent in 2024-2025. In addition, the entire district shifted to a four-day work week model in 2024-2025 as a strategy to recruit and retain teachers.

There have also been significant changes to the school's literacy curriculum and assessment framework since the inception of the partnership. In the first year of our work with EBE teachers, the school was using a small group, guided reading curriculum created by author Jan Richardson, which was based on methods discredited by the SOR and which did not appear on CDE's advisory list of approved reading curricula. To comply with state requirements, the school abandoned this curriculum in 2022-2023 but did not provide teachers with a replacement curriculum for small group instruction, leaving it up to individual teachers to plan their own

small group lessons. The core literacy curriculum, used for shared reading, writing, and other literacy blocks has remained Houghton Mifflin Harcourt's *Into Reading* across all the years I have been working at EBE, although teachers' use of that curriculum ranges, with some teachers following it very closely and others supplementing it heavily with their own resources. The same year the school dropped the Jan Richardson curriculum, it also replaced its literacy assessment, discontinuing use of an assessment not aligned with the claims of the SOR, Fountas and Pinnell's Benchmark Assessment System (BAS), in favor of Acadience, an assessment aligned with the SOR evidence base. To comply with READ Act requirements, the school used a separate, computer-adaptive assessment. In terms of demographic information about the school and community, upon which I elaborate in each of the three articles, it is helpful to note that EBE serves almost 500 students, roughly 70 percent of whom are white and almost 30 percent of whom are Latinx, with a small number of children from other racial identities.

As a participant and researcher in PD activities at EBE Elementary, I have been situated complexly as both insider and outsider. For instance, as a White woman, I seem to share some identities with many of the teachers at EBE (which reflects longstanding trends in elementary education, where White women predominate). While I do not have a direct or personal relationship with the community in EBE, I have been invested in rural education ever since I spent my first years as a teacher in rural southern Louisiana. My tenure there allowed me to resonate with challenges described by my partners, such as teacher shortages that force principals to bring former staff members out of retirement or hire uncertified teachers, rapid potential growth in student population that creates new needs and pressures related to school funding, and overburdened support staff, such as speech therapists and special education teachers, who spend hours driving between schools.

In some ways, this familiarity with life and work in a rural area served a supportive function in my work with EBE teachers and leaders, but it is also crucial to keep in mind elements of my positionality that have, at times, acted as barriers to collaboration and communication. Specifically, my affiliation with a university has demonstrated the potential to impact how teachers and leaders think about and relate to me, especially given current pressure in research, practitioner, and policy contexts to ensure that reading instruction is science- and evidence-based. Because literacy research and researchers have been instrumental in positioning certain ways of teaching reading as acceptable and others as baseless, it would be completely reasonable for a EBE teacher to perceive my advisor and me as external consultants who simply enter the school, tally up the "ineffective" ways teachers are teaching children to read, and demand changes to teacher practice. Indeed, there have been times over the past four years when that perception seemed strong. Yet I have also found some success in attempting to mitigate this implied binary between the "experts" who know best practices and teachers in need of intervention. Specifically, I have endeavored to: (a) recognize the power differentials that accompany my teacher colleagues versus me, given our differences in institutional affiliations, (b) prioritize authentic relationship building with my teacher and administrator colleagues, and (c) emphasize the collaborative, relational, and non-evaluative nature of my work with teachers to position myself as learning alongside them.

Methods, Data Collection, and Data Sources

In planning methods for data collection, I am drawing on a number of ethnographic tools to investigate how teachers, administrators, and researchers collaborate to deliver school-embedded professional learning around reading instruction. In this section, I first review how my methods are informed by tools from the tradition of ethnography, then outline my process for

collecting data, including a shift away from the Learning Lab (LL) cycle I originally envisioned as a structure for professional learning. Finally, I overview my approach to data analysis, including categorizing and connecting strategies for qualitative coding.

Ethnographic tools and their utility in the study

Ethnography provides methods to capture participants' views, perspectives, and meaning-making (LeCompte & Schensul, 2010), making it a valuable tradition from which to draw in my study of school-embedded PD that strives to center teachers and their learning. Specifically, there are three characteristics of ethnographic research that inform the methods in this dissertation study, guiding my day-to-day and week-to-week activities at the school as well as my processes for collecting and organizing data. The first is what Spindler (1997) called "immersion in the field situation," meaning that the researcher spends a great deal of time in the natural setting where social interactions occur to learn about research questions of interest. It also means that building trust, rapport, and even friendship between researchers and participants is paramount (LeCompte & Schensul, 2010) so that participants feel comfortable voicing their perspectives in the presence of researchers without altering their "normal" behavior. To build such trust and immerse myself in the school site, I have: spent as much time at the school as possible, including twice-weekly visits in the 2023-2024 school year, attended school and community events like a 2023 talent show, brought gifts and small tokens of appreciation to meetings and classroom visits, responded to administrator requests to deliver whole-staff PD, and engaged in informal conversations with teachers at school and over the phone.

A second ethnographic tool I employed in this study is participant observation. Related to the idea of immersing myself in the field situation, this meant that I was an active participant in the everyday life of the school, contributing to discussion in weekly professional learning

community (PLC) meetings with my second-grade collaborators, joining teachers in the search and creation of relevant instructional materials, teaching, and co-teaching during shared classroom enactments. Rather than sitting back and watching what is happening in the course of these activities, I was a part of them, recording field notes as I go. Emerson's (2011) recommendations about taking notes in the field proved to be particularly helpful given, as I consistently followed his advice around "jotting" in field notes to capture sensory details about what I saw and heard, including short phrases of exact quotes, while avoiding generalizing or impressionistic language. These conventions for "participating-in-order-to-write" (Emerson, 2011) were valuable for my inquiry at EBE.

A final characteristic of ethnography that is salient for my study is the idea of conducting consistent interviews, ranging in their formality and structure. (Spindler, 1997) emphasized that consistent interviewing, in conjunction with observation, makes it possible to start to understand participants' realities, perspectives, and meaning making. As will be elucidated in the next section on data sources and collection, I conducted formal interviews with participating teachers throughout the course of the 2023-2024 school year. In addition, though, my casual conversations with teachers in the hallway, at recess, before and after meetings, and on the phone after school held opportunities to continue building rapport while gaining insight into how teachers are thinking about the partnership and PD.

Data collection and data sources

In the initial phases of the partnership, which are the focus of Article 1, my advisor and I envisioned this dissertation studying a particular structure for professional learning, a Learning Lab (LL). The LL model has been explored in math, literacy, and other content areas (Gibbons et al., 2017) and by my advisor and her collaborators (Ghousseini et al., 2022). In the original

vision for the partnership with EBE, the LL cycle would have involved four distinct phases where teachers would have identified a PD goal, identified relevant instructional resources, tried out a lesson connected to the goal, and debriefed together (see Appendix A for a graphic summarizing the LL cycle). However, after a year of attempting to bring this structure to our work with EBE teachers, even with the help of an additional doctoral researcher in 2022-2023, we found that it was not working and that there were other ways to be responsive to our partners' needs and interests. We attempted to move through each phase of a LL, as described in Article 1, but over time, especially between the 2022-2023 and 2023-2024 school years, we discovered that following a formal model of professional learning and progressing through clearly defined phases was challenging because of how often we could be on site at the school. In addition, it was difficult to sync up activities from our LL model (goal setting meetings, planning meetings, classroom enactments, debriefs) with pre-existing routines at the school like weekly PLC planning meetings and already planned in-service PD days.

After a few months of trying to actualize a full LL cycle and being met with these logistical difficulties and other complexities described in Article 1, I decided to adopt a different approach to collaboration with EBE teachers from the 2023-2024 school year onward. This approach embraced a kind of deep collaboration that was less formalized and focused resolutely on getting to know my teacher partners, students, and the EBE community. The shift also represented my attempt to be responsive to my partners' priorities and needs, rather than clinging to my pre-existing interests as a researcher. It positioned me to explore the same issues at the heart of a LL—PD goals that mattered to teachers, tools that might support such goals, how they wanted to take it live—without having to take from teachers' planning or after school time. Letting go of a LL-style of collaboration and of the expectation that professional learning might

commence through structured activities or meetings was significant in two ways. First, it helped me generate rich data connected to my research questions. Second, and just as importantly, it followed the lead of my teacher partners, ensuring that our work together enriched their learning, rather than adding additional tasks to a to-do list.

Co-teaching was a cornerstone of my new approach, following the precept of LLs to make pedagogical dilemmas shared rather than solo (Ghousseini et al., 2022). In Theresa's classroom, for instance, I consistently engaged an informal co-teaching routine where she and I would swap the "lead" teacher role, using cues we devised organically, like raising our hands, whispering a quick conferral, or announcing to the class, "I want Miss Olivia to show us this really quickly." Even when taking a different tack to working with teachers, generating routines like these for co-teaching without much formal planning like in a LL, I was able to collect a robust data set, including audio recordings and transcripts of: second-grade planning meetings, whole-school meetings, including back-to-school PD and video recordings of co-taught lessons, as well as field notes from every visit to the school.

In addition to these data sources, I conducted interviews three times during the 2023-2024 school year, in the beginning of the year (BOY), middle of the year (MOY), and end of the year (EOY), using the interview protocols listed in Appendices B, C, and D. In keeping with the more informal style I adopted and my commitment to minimize taking time after-school or adding to teachers' workloads, I brought a degree of flexibility to scheduling these interviews, opting for what worked best for my partners. Some of the interviews took place individually, with just one teacher and I conversing during her planning time or recess. At other times, I interviewed multiple teachers at once during the lunch period, when it was our habit to all eat together in Sophie's classroom and chat until students returned from their lunch period in the

cafeteria. I still followed my interview protocol, introducing the interview and posing interview questions, allowing each teacher a chance to respond. This group interview format made it possible to observe the teachers casually interacting with one another and with me, and I found it generated particularly rich data, as one teacher's comment often sparked another's, leading to responses that would not have necessarily arisen had the interview followed a one-on-one style.

Data Analysis

Sociocultural theories of learning are central to my approach in analyzing data related to teacher learning within a school-embedded PD partnership. A sociocultural perspective on teacher learning holds that our thoughts and behavior are so shaped by available social and cultural tools that it is not enough to just study how individual cognitive conceptualizations change. Rather, we must consider how individuals utilize particular cultural tools in particular social contexts or activity settings (Collins, 2012; Wertsch, 1991). This central tenet from sociocultural theory, which informs my analytic approach, means that in analyzing data related to the PD partnership, I recognized that individual teachers' learning is braided together with the social and cultural contexts in which that learning takes place. Thus, when I read and analyzed any of the data sources from my multiple years of work with EBE teachers, my aim was not just to pinpoint what teachers have learned about a given practice for teaching reading. Rather, I strived to explore how they were learning within the social and cultural complexities of their classroom, school, and community and the "interpretive frames that influence their ways of attending and responding to others within the social activities of the classroom" (Dyson & Genishi, 2005, p. 12). The analytic tools I describe below supported me in those goals. First, and key to my analytic approach, was the use of inductive and deductive strategies for qualitative coding that allowed me to build understandings from the ground up through the

shared experiences and interactions embedded in this particular context and partnership, as well as through some of the ideas that arise from the literature, theoretical framework, or research questions. Second, critical discourse analysis is a tradition that offers tools and methods to situate interaction in specific sociocultural contexts when studying learning and look closely at language use within transcripts.

Data Management, Pre-Coding, and Coding

Throughout this dissertation, I continued routines for data management that began in the first two years of the partnership at EBE as I collaborated with my advisor, grade level teams of teachers, the principal and assistant principal, and other graduate research assistants. Specifically, I took field notes every time I visited the school (twice per week in 2023-2024), used audio recording software to record PLC meetings, whole-staff PD, and interviews, and video recorded co-taught lessons, with children's faces blocked from the camera. I transcribed audio and video recordings with transcription software and followed naming conventions to catalogue the date, teacher(s) involved, and type of data. Organizing the data in this way helped provide insight into how the partnership evolves over time (RQ 1), how PD, curriculum, and leadership arose across data sources (RQ 2), and how teachers were coordinating evidence from the SOR with evidence from their own classrooms (RQ 3).

Additionally, throughout data collection, I engaged some practices that could be called "pre-coding" because they took place before the start of my actual coding processes. Like my habits for data organization, these practices have become routine for me since the start of my work at EBE Elementary in 2021. One such practice was recording voice memos on my one-hour drive back to Boulder from the school to flag any interactions or occurrences that captured my attention during my time at the school that day. Similarly, as I jotted field notes throughout

the course of the school day, I starred, highlighted, or underlined what Boyatzis (1998) called "codable moments," particular moments that arise during data collection that seem important to return to. In sustaining these types of pre-coding practices, I took to heart Saldana's (2015) advice to begin the work of coding side-by-side with the work of data collection, as opposed to waiting until my time in the field is complete to begin coding. Doing these things made it possible to not only document my analytic thinking about the data as it was being collected, but sparked that type of analytic thinking for later refinement during my more formal coding cycles (Maxwell, 2012).

Before describing what those coding cycles entailed, I overview three main principles about qualitative coding that I strived to embody throughout data analysis. In this overarching chapter on methods, I describe my general approach to coding in this study, while in each subsequent article, I discuss my analytic approach for those specific questions. First, I recognized that coding provides a bridge—a kind of transition—between collecting data and analyzing data (Saldana, 2015). When I created codes, I remembered that I was doing interpretive work in an attempt to capture the essence of language-based data, and such work opens the door to analyze the data more deeply. Second, I approached the coding process remembering that strategies for qualitative data analysis must involve both categorizing *and* connecting (Maxwell, 2012). By that, I mean that I strived to coordinate the processes for bucketing data into discrete categories with processes for considering data in context, and across multiple sources: in generating categories, qualitative coding makes it possible to analyze the connections between those categories (Maxwell, 2012; Saldana, 2015). Finally, I grounded my analytic approach in the cyclical nature of coding, the necessity to conduct

multiple cycles of coding in order to find and explore repeated patterns. I describe the aims of each cycle next.

In the first cycle of coding, my goal was to generate what Maxwell (2012) called "organizational categories," or what Saldana (2015) called "descriptive codes." As Emerson (1995) points out, generating these types of codes requires a distinctive kind of writing, given that the objective is write "a word or short phrase that captures and signals what is going on in a piece of data in a way that links it to some more general analytic issue" (p. 146). These words or phrases served as "bins" into which data can be sorted for future analysis, and at least some of the "bins" may pre-exist data collection, i.e., they may be categories I anticipate seeing before I interview teachers (Maxwell, 2012). For instance, the three organizational conditions from RQ 2—PD, curriculum, and leadership—were organizational categories, or descriptive codes, that I applied during the first coding cycle, tagging them as general topics that arose across data sources.

Starting in the second coding cycle, and continuing into subsequent cycles, my goal was to be generate what Maxwell (2012) calls "substantive categories," which more deeply describe what participants say and do, in their own words, when possible, to capture their own meanings. Creating these types of categories involved a more inductive approach in which I remained open to whatever emerges as important in the data, without expectations about what to look for (Maxwell, 2012; Seidman, 2013). Additionally, these multiple rounds of coding involved reorganizing my initial organizational categories. For example, as will be described in more detail in the second article in chapter five, I decomposed the organizational category of "leadership" into individual codes that included "accountability" and "the freedom/consistency paradox." The overarching aim in these coding cycles was to look for thematic connections

between previously identified sections of data and to label those connections (rather than a segment of data itself) according to a general analytic subject or topic, while remembering to keep such labels tentative. To spark the kind of analytic thinking necessary to make these thematic connections, I asked myself the questions recommended by Emerson (2011) as I examined field notes, interview transcripts, and other data sources, including:

- What are people doing? What are they trying to accomplish?
- How, exactly, do they do this? What specific means and/or strategies do they use?
- How do members talk about, characterize, and understand what is going on?
- What assumptions are they making?
- What do I see going on here?
- What did I learn from these notes?
- Why did I include them? (p. 146)

Across data sources, my coding attended to how, for instance, participants story their experiences, engage in collaboration, reference their identities and their school context, and talk about students, reading instruction, and reading policy. As I progressed through the various multiple rounds of coding, I created and updated a codebook that keeps a record of emergent codes and how I organized, reorganized, and collapsed them into categories and subcategories (Saldana, 2015). In between coding cycles, I plan to wrote theoretical and integrative memos and recorded sensemaking conversations with my advisor and collaborator to keep track of the ideas that arose as I read and re-read data, as well as the linkages between analytic themes and categories (Emerson, 1991).

Critical Discourse Analysis

Critical discourse analysis serves as a secondary analytic tool to the coding approaches described in the previous section, as it helped me to gain insight into interactions within themes that arise as important in my coding. In *The Handbook of Discourse Analysis*, Van Dijk (2001) defines critical discourse analysis as "a type of discourse analytical research that primarily

studies the way social power abuse, dominance, and inequality are enacted, reproduced, and resisted by text and talk in the social and political context" (p. 354). Built on tenets that map to my grounding in poststructuralist theories and critical policy analysis such as the idea that power relations are discursive, that discourse constitutes society and culture, and that discourse does ideological work (Fairclough & Wodak, 1997) , critical discourse analysis makes it possible to learn about how structures of text and talk work to reproduce and/or resist inequality, power, and dominance (Van Dijk, 2001). This capacity of critical discourse analysis is especially salient for my study because it allows me to examine text from audio transcripts or field notes more closely and attend to multiple dimensions of the social interactions between collaborating teachers, including the sociocultural context surrounding the interactions and the ideologies that underlie them.

There are many approaches to discourse analysis, including critical approaches. For my purposes, I turn to Fairclough's (2013) approach to critical discourse analysis (CDA), which centers sociocultural contexts and provides insight into how discourse might index assumptions, binaries, and resistance related to teaching, learning, literacies, and policy. I employed CDA to look more deeply at the specifics of wording and language use within examples of interactions that arose as illustrative of salient themes from my coding process. I drew on questions Fairclough (2013) suggests for close examination of interactions or texts (such as the text from my transcribed interviews or other data sources), such as:

(a) What assumptions are visible in the language?
(b) How are binaries used in this text?

1. Are they present either explicitly or implicitly?
2. Are they reified?
3. Are they troubled?

(c) Are words used that place a value judgment on a specific idea/object/person?

(d) Is language used that could have multiple meanings?
(e) Is language used that suggests partial or incomplete understandings? (From Dutro & Caasi, in process)

The approaches to data analysis described in this chapter— grounding in sociocultural theories of teacher learning, deductive and inductive coding strategies, and critical discourse analysis—supported me in the larger aims of my dissertation study, including the goal to gain insight into teacher-centered/teacher-led professional learning in an era of SOR reform. Beginning with sociocultural theories of learning in mind made it possible for me to examine data sources with the key, foundational recognition of the intertwining between what a teacher learns and the social and cultural context in which they are learning. The multiple rounds of qualitative coding I engaged allowed me to elevate themes across data sources related to my RQs. Finally, critical discourse analysis served as an additional analytic tool to examine teacher interactions with one another, with me, and with students. Amid such plans for analysis, though, I conducted this dissertation study remembering the need to stay nimble and responsive to the particulars of working in partnership with school colleagues.

Chapter Four: Building Partnership with Rural Elementary Teachers: Complexities and Opportunities Amid State Reading Policy Mandates

Given the current wave of U.S. states legislating particular approaches to reading instruction inspired by Science of Reading (SOR), it is paramount to support teachers in responsive, agentic ways as they make required shifts in their literacy practice. Research shows the value of collaborative professional learning that is embedded in local school contexts and closely connected to teachers' practice (e.g., (Lefstein et al., 2020; Webster-Wright, 2009; Xu & Pedder, 2014). Studies also demonstrate the affordances and complexities of professional learning collaborations between university and school-based educators, including the context-specific considerations that such partnerships demand (Resnick & Kazemi, 2019). Given our investment in such partnerships and current demands facing literacy teachers in the U.S., we see an urgent need to build knowledge about the nuances of building and sustaining university-school professional learning partnerships, particularly in intensive literacy policy contexts. Toward informing that conversation, we share findings from an inquiry into a research practice partnership (RPP) designed to address two related imperatives: building the field's understanding of place-based professional learning and meeting the particular literacy instruction needs of teachers in a rural elementary school during a time of significant and swift changes in reading curriculum and practice.

In this paper, our primary objectives are twofold. First, we aim to contribute to understandings of how school-university partnerships are built across geographic contexts in ways that support university-based researchers to engage collaborative designs for learning with teachers, particularly, as in our case, with rural districts who may navigate constrained access to

context-specific professional development (PD). Second, we seek to understand the role played by state policy mandates in how our school-university partnership unfolded over time.

The policy context of this project centrally involves the Colorado READ (Reading to Ensure Academic Development) Act, originally passed in 2012, which required assessment of students' literacy skills in grades kindergarten through third. In 2019, Colorado lawmakers approved updates to the READ Act that, among other things, required school districts to select reading curricula from an advisory list of state-approved programs and required all K-3 teachers to complete 45 hours of training from the state or a provider by August 1, 2022 (CDE, 2019). In addition, our goals for collaborating with our rural school partners around these policy demands were fueled by past work that has demonstrated the learning potential of teacher and teacher educator collaboration that intentionally seeks to challenge the boundary between performance (a role usually held by teachers) and observation (a role usually held by researchers) (Kavanagh et al., 2022). Against the backdrop of this policy context and our goals to support teachers in navigating shifts in policy and practice, we share insight into the following research question: How do elementary teachers and university researchers build partnership across geographic contexts toward collaborative school-embedded professional learning?

Review of the Literature

We draw on the fields of RPPs and practitioner inquiry to build and study our partnership-building processes with rural elementary educators. Studies of RPPs investigate the collaboration between sociocultural communities engaged in meaningful joint work on shared and individual goals (Akkerman & Bruining, 2016; Penuel et al., 2015). Equally important, practitioner inquiry seeks to “generat[e] deeper understandings of how students learn—from the perspective of those who do the work” (Cochran-Smith and Lytle, 2009, p. 22). In RPPs, all

participants engage with each other's perspectives and knowledge and develop new, innovative practices (Wenger, 1998). Practitioner inquiry likewise emphasizes how teachers work individually and collectively through iterative cycles of collaboration to define problems, plan action, and reflect to make context-specific classroom decisions (Butler & Schnellert, 2012).

Informed by research about both RPPs and practitioner inquiry, our larger study's goals include pursuing partnership with school leaders and teachers to design and study opportunities for collaborative teacher learning that centers both teachers and students as knowledge-holders. Recent studies (Gibbons et al., 2017; Kavanagh et al., 2022) suggest that place-based, relational opportunities for teams of classroom teachers and teacher educators to engage in cycles of shared learning in moments of practice hold special potential to deepen collaboration, create a sense of shared ownership over pedagogical dilemmas, and zoom in on the complex, moment-to-moment decisions teachers make in every lesson.

Inspired by this scholarship, we brought a vision for professional learning to the partnership that drew on two main structures and tools: a design called Learning Labs (LLs) as a way to collaborate across a cycle of instruction, and a routine known as a Teacher Time Out (TTO), which allows for pausing during instruction for teachers to deliberate and make decisions in the moment that honor students' knowledge, ideas, and responses (Gibbons et al., 2017). The lineage of these design approaches to PD, specifically LLs and TTOs, derives from mathematics education research, as well as recent work, including our own collaborations across disciplines (Ghousseini et al., 2021), and studies in literacy contexts (Caasi et al., 2023; Schneider Kavanagh et al., 2022). Together, this scholarship has shown the potential for LLs, TTOs, and other practices to enrich moments of pedagogical decision-making in literacy by allowing decision-making to become shared across a team of collaborating teachers and to exist in real

time, rather than waiting to reflect on an instructional move after it has already been made. These features mean that a LL design for professional learning is inherently collaborative, school-embedded, and practice-focused, all of which we find especially valuable and timely for literacy educators, given heightened policy pressures from the SOR (e.g., MacPhee et al., 2021) and politicization of content and instruction (Villavicencio et al., 2023).

Although research speaks to the benefits of RPPs, researchers have also explored the vital aspects of effective, reciprocal partnerships between university- and school-based educators, as well as the challenges of building and sustaining generative, responsive collaborations (e.g., Denner et al., 2019; Walsh & Backe, 2013). Building partnerships across institutional contexts is intensive work, even when partners work in close geographic proximity. For instance, partnerships require attentiveness to the various goals of stakeholders and how to negotiate reciprocity and mutual trust (Jones et al., 2016). In building and studying our partnership with teachers and administrators, we recognized these general insights about RPPs more broadly, while also carefully considering elements of a rural context that may be salient for our work.

Among many, we see three elements of teaching and learning in rural schools that hold particular importance for our partnership. First is the importance of remaining rooted in place-based approaches (Reagan et al., 2019) in partnering with teachers and administrators in order to resist reproducing "the rural school problem," a historical trend in which researchers viewed rurality as anti-modern, thus motivating a research agenda focused on ways to achieve parity between rural schools and urban schools (Biddle & Azano, 2016). Second, we recognize the distinct challenges faced by rural schools in our state related to staff turn-over, strained financial resources, and access to instructional support (Hesbol et al., 2020) as well as inequitable access to healthcare and employment for some families (Vernon-Feagans et al., 2018). Finally, despite

efforts to attract teachers from metro areas to rural locales (as described in Cowen et al. (2012), for example), research indicates that "teaching is largely a 'home-grown' workforce" in rural schools, making accessible place-based PD all the more vital in efforts to support teachers' practice (Barrett et al., 2015). Given these particular nuances of a rural context, the broader complexities of building school-university partnerships, and the opportunities such partnerships can foster, this paper zooms in on some of the key issues that arose as we pursued our work with our school partners in rural Colorado.

Guiding Theories

Theoretically, we ground our vision of partnership and collaborations with school partners in theories that emphasize learning as a social and cultural process impacted by and implicated in power (Nasir et al., 2021), including long standing inequities in U.S. schooling that often disproportionately impact rural students and teachers. Sociocultural theories of learning guide our processes of inviting partners into collaboration that is responsive to particular teachers and students in specific contexts. These lenses view learning as a cyclical, ongoing process of being and becoming through shared activity, rather than contained activity toward a pre-conceived end goal (Herrenkohl & Mertl, 2010).

Further, the idea of mediation in sociocultural theory emphasizes the dynamic interplay between people, their social environment, and cultural tools, including language, ideas, and physical and textual artifacts (Pekarek Doehler, 2002). Here we particularly focus on interactions and collaborative activities that provide opportunities for individuals to engage in mediated learning, drawing on the resources provided by the social and cultural context (Wertsch, 2007). With reading policy as one shared cultural context, the varying positions, identities, and experiences we brought to our interactions as partners served as mediating tools for navigating

both the partnership and policy. For instance, and as we will discuss, we were a mediating presence in our partners' understandings of some aspects of the state policy, including the role of the curriculum they had adopted, just as our partners' talk and ideas related to their histories and hopes for professional learning mediated our learning about the school, the community, and what it might mean to be responsive to partners' goals.

We also draw on critical theories that conceptualize storying and reciprocal witnessing of identity and experience as an always-present, relational, and embodied practice that is central to humanizing pedagogy and responsive research partnerships (Campano et al., 2020). Our goals resonate with what San Pedro & Kinloch (2017) describe as the urgent need for humanizing, collaborative inquiry that values "stories, dialogic listening, and self-determination" (p. 375). These lenses demand analytic attention to reciprocity, storied knowledge, and how forms of participation provide insights into collaborators' positioning in relation to one another through the histories and identities they embody, as well as the policies and practices that are present in this particular school and community context over time.

In addition, these theories inform our analytic tools for understanding the process of partnership-building among the layered presence of micro contexts of the rural community, school context, and relationships among researchers, teachers, administrators, and children, alongside the macro contexts of pressing state literacy policies and related shifts in curriculum and instructional practices.

Context

Before turning to our methods for examining our research question about how the partnership has developed over time, including our data sources and tools for data analysis, we describe the context of our work with rural elementary educators in this RPP. The work takes

place at an elementary school in rural eastern Colorado, East Bridge Elementary (EBE, a pseudonym), that receives Title 1 funding. The town where the school is located has 3,013 residents and is located about 40 miles east of a metropolitan area via a major interstate highway (U.S. Census Bureau, 2019). Along the 59-mile drive there from our university campus, we noticed an abundance of construction vehicles and signs advertising newly constructed homes in former ranch and farmland, representing one sign of the rapid growth in the area and the demand for more affordable housing.

We are a team of two teacher educators and literacy researchers who work at a large flagship research university in a metro area of the state. Olivia is a white, cis-gender, straight doctoral candidate with seven years of experience in elementary classrooms, first as a K-1 teacher and then as an instructional coach. She drew on her experience in implementing standards-based literacy instruction and designing teacher PD to deeply understand our partners' goals for teaching and learning. Elizabeth is a white, cis-gender, straight professor and former elementary teacher with more than 20 years of working as a university teacher educator and partnering with classroom teachers and students in inquiries focused on pedagogies responsive to students' lives, identities, and knowledge. She also has deep familial roots in a rural region of this state that provided some of the impetus to launch this partnership.

During our partnership, we have worked with two principals, both white women, and two assistant principals, one white woman and one white man (we note that we only name identities that our partners have explicitly shared with us). The teachers who volunteered to participate in our PD partnership are women, and the group varies in age and racial identities, with the majority being white. Our partners' experiences range from a teacher entering her first year to teachers with more than 20 years in the classroom. According to the state's publicly available

student demographic data, 544 students attended EBE in the latest year of reporting (CDE, 2025). 15.1% of those students have been identified as English language learners and 39% qualify for free or reduced-price lunch. According to CDE, of the 544 total students, 312 are White, 197 are Latino, 7 are Black or African American, 4 are Asian, and 24 are Two or More Races (CDE, 2025).

Methods

Our RPP is a qualitative study oriented around a model of school-embedded professional learning, Learning Labs (LL) (Ghousseini et. al., 2021), in which teachers and researchers have opportunities to learn together in a cycle of collaboration across four phases (see Table 1). Over two academic school years, we worked to launch the LL structure with our partners at EBE, maintaining a monthly presence at the school to explore how the LL cycle unfolded and, in the focus of this analysis, to learn from our experience and documentation of building the partnership. As the partnership evolved from the early stages (first two years) described in this paper to later stages, which continue today (into year 4, as we write this), we have consistently held sense-making conversations with our teacher and administrator partners to reflect on what we are all learning about school-university partnerships while working on practice together.

One feature of this partnership's lab-type structure for professional learning is that it allows teachers to make and discuss instructional decisions in the moment, rather than reflecting on pedagogical dilemmas after they have arisen. Another feature, emphasized by Gibbons et al. (2017), is the way the structure makes enactments of teaching shared, not solo. This commitment to shared enactment is significant because it intentionally subverts a prominent paradigm in teacher education and PD: that there is one teacher who does or performs the teaching, separated from a group of fellow teachers and teacher educators who spectate the

teaching, playing no active role until the performance is concluded. These cornerstones of the LL as a structure for professional learning shaped our vision for the kind of work we hoped to do with teacher and administrator colleagues and informed the way we went about building a partnership at EBE.

Data Sources and Analysis

Our data (see Table 1) include field notes, research team memos, audio recorded conversations and written reflections to document the partnership building process. We also collected data during each phase of the LL cycle, which served as artifacts to capture teachers' collective planning processes as the partnership took shape.

Table 1. *Data Sources and Collection Tools*

Partnership Building Process	**Data Sources**
Documentation of building the partnership	Fieldnotes; research team memo, audio recorded conversations and written reflections
Collaborative Learning Process	
Phase 1: Share PD Goals	Video and audio recordings of Monthly Goal-Setting Meetings, meeting agendas and notetaking documents
Phase 2: Identify or develop relevant resources	Collection of Instructional Resources (paper and online documents)
Phase 3: Try it out	Video and audio recordings of Classroom Enactments, field notes
Phase 4: Debrief	Video and audio recordings of Debrief Conversations, field notes
Ongoing	Zoom recordings of participant interviews, at the start and end of the project, as well as in spring of each school year.

In order to explore how elementary teachers and university researchers build partnership across geographic contexts, we used a collaborative, iterative coding process. This process began with "pre-coding" (Saldana, 2015), as we spent each drive back to our campus after a day at EBE

discussing significant conversations or interactions that represented "codable moments" (Boyatzis, 1998) to which we wanted to return during analysis. Next, members of the research team individually annotated data sources with descriptive codes, short words or phrases that captured what was going on in a particular piece of data while linking it to a larger analytic issue, such as statewide reading policy. We then conferred as a team about the descriptive codes assigned by each researcher, collaborating to resolve disagreements and generate what Maxwell (2012) called "substantive categories," broader themes that provided more direct insight into our research question about processes for building partnership in a rural context.

In one transition from descriptive codes to substantive categories, we began with the descriptive code, "confusion about partnership" to mark moments when teachers seemed unclear about what working together would entail, such as when the second-grade level lead implied that we might serve in a coaching capacity. After the research team's collaborative coding conversation, we clustered this "confusion" code into a larger theme about teachers being "caught between" what administrators and researchers hoped literacy PD might accomplish. Discerning nuances like this in how participants positioned themselves, others, reading policy, and literacy within those expectations required close analysis of the language within some of the artifact and transcript data.

Findings

Our analysis surfaced complexities and shifting opportunities connected with our question about the process of building a partnership across geographic contexts toward collaborative school-embedded professional learning. A central finding involves shifting expectations on the part of administrators, researchers, and teachers about what working together might entail. We organize this section around those layers of expectations we found from

members of the partnership, drawing on examples and illustrative moments from our work with teacher and administrator colleagues at EBE across two academic years (2021-2022 and 2022-2023).

The nearly 60-mile physical distance that separates EBE from our university campus is an overarching complexity in building the partnership with teachers and administrators at the school, which speaks to the importance of partnerships with rural schools and studying the processes of such partnerships over time. This coincided with an additional layer, one that involved important tensions between what administrators, researchers, and teachers expected of the partnership and how those expectations shifted over time. We found that administrators, specifically the principal, assistant principal, and former superintendent tended to view the partnership as providing targeted PD that would address purported gaps in teacher practice, while researchers held the expectation that the partnership would allow for the co-design of non-traditional, teacher-driven PD. It is important to note that we view administrators' desire to provide PD opportunities for their teachers as a supportive practice in school settings. We acknowledge the many roles that administrators navigate, as well as the pressure they felt to "home-grow" their teaching workforce, i.e., to bolster effective practice among their existing teaching staff. We strived to continually show appreciation for the hopes and visions held by administrators for teaching and learning in their school's classrooms.

As we discuss below, our data show how two slightly different visions of the partnership persisted, where teachers' expectations were often obscured by the expectations of others, a conundrum that we believe (a) is a manifestation of the intensive policy context around elementary reading education in Colorado and across the U.S. and (b) has been ameliorated over time, as personal and professional relationships between teachers and researchers have grown stronger.

Administrators' Expectations

From the very beginning of our efforts to build a partnership at EBE, administrators expressed interest in the literacy PD we could provide because of its capacity to address perceived needs and gaps in instruction. It made sense to us that the principals would adopt this focus, given the general pressure they faced to complete teacher evaluations and comply with state mandates, as well as issues they navigated as rural school administrators, such as the need to recruit, retain, and invest in the teachers in their building, since attracting teachers from elsewhere does not always prove to be an effective strategy (Barrett et al., 2015). Because of turnover in administrator positions, another challenge shared by other rural districts in this state and beyond, there was also some variation in how each of our administrator colleagues expressed their expectations of the PD partnership and the needs they envisioned being fulfilled by the PD (e.g., from wording that conveyed weaknesses in instruction to an emphasis on both strengths and areas in need of growth).

For instance, in our very first meeting in December 2021 with a former superintendent and principal of EBE (both exited those positions in spring 2022), the superintendent lamented that many teachers who had completed the state-required 45 hour training in reading instruction were treating the training as "just a course," something to "sit and get," rather than applying the methods or "embedding" those methods in whole group reading instruction (Field Notes, 12/1/21). Elaborating, she explained that one of her goals for the PD was to help "teachers get the basic skills that literacy specialists have" in order improve whole-class instruction, meet the needs of students who were "farther behind because of COVID," and prevent the state-required training from being a one-time, decontextualized experience that teachers simply forget (Field Notes, 12/1/21). The principal, concurring with this hope for the PD, asked about whether all 32 teachers at the school could participate, indicating her interest in spreading to the whole staff a

model of "not sit and get, but embedding" (Field Notes, 12/1/21). When our team explained that the vision of collaboration we hoped to enact with teachers tended to work better with teachers who opt in, the principal adjusted, naming a few grade level teams that might benefit from the work and offering us a chance to present at a staff meeting so we could invite interested teachers from across the school.

In some ways, this exchange represented the first micro-difference in expectations between researchers and administrators: the principal and superintendent had in mind an across-school PD need–the need to embed evidence-based practices for teaching reading into whole group instruction–and saw the PD as a way to meet that need for all teachers. We, the university-based literacy researchers, recognized that our work with teachers related to supporting enactment of the required instructional shifts should align with this administrator goal that extended to classrooms across the school. However, we also held firm to the idea that it should arise from teachers' individual interests and priorities rather than something that required everyone to work on the same goals. The principal's support for that vision of the PD allowed teachers across grade levels to opt into the experience, which approximately half of them did at the time; though, as we explain, shifts in leadership necessitated changes to those structures the following year.

The 2022-2023 school year brought a new principal and assistant principal, and our first conversation with them in fall 2022 held similar threads, with enthusiastic support for continuing the partnership and hopes for the PD including curriculum fidelity and the observation of "exemplary" teaching. In some ways, the new principal echoed the former superintendent's priority to "embed" state mandated, SOR instructional practices into classrooms, adding an additional layer to her description of the school's PD needs by pointing to teachers' "lack of exposure" to the SOR and their attachment to balanced literacy and the "old" way of teaching

reading. Despite having completed the state-mandated training, teachers "didn't know other possibilities for doing things," according to the principal, and, in her view, still did not know or understand distinctions between phonological awareness, phonics, fluency, and other reading foundational skills (Field Notes, 10/10/22). The school's reading curriculum, Houghton Mifflin Harcourt's (HMH) *Into Reading* served as one tool for navigating these perceived gaps in teacher knowledge, but, as the assistant principal elaborated, there were teachers who felt unsure of the curriculum and departed from it liberally, creating a conundrum around implementation fidelity explained, in her words, as "we won't know if the curriculum is working or if there are gaps in it unless it's being followed with fidelity" (Field Notes, 10/10/22).

This issue of fidelity became increasingly complex when the researcher team realized that HMH was not fully aligned with the SOR in ways administrators expected, even though it was on CDE's advisory list of approved curricula for district adoptions. As we explored the curriculum in preparation for an upcoming lesson demonstration, we discovered that some areas of reading instruction, such as approaches to teaching sight words and some decoding strategies, only partially met state evaluators' criteria for SOR alignment (and found where the CDE acknowledged this in a rubric document on their website). We shared this information with administrators via email and administrators expressed their gratitude for us "digging in so deeply" (Email communication, 11/30/2022). First through this email response and in later conversations as the partnership continued, administrators explicitly expressed their trust in members of our research team to support teachers in navigating contradictions like the one involving HMH, where some aspects of the curriculum were not aligned with SOR methods, thus necessitating that some curriculum routines should not be followed with "fidelity."

Out of these general administrator concerns–around teachers' knowledge of the SOR and implementing curriculum with fidelity–emerged an expectation about what the partnership with

literacy researchers could accomplish. Namely, it could show teachers "new" ways of doing things that are aligned to the SOR and to the school's curriculum, through a particular means to which our administrator colleagues seemed especially drawn: the "demo lesson." "Demo lessons," or demonstration lessons, arose in the first conversation with the new principal and assistant principal as a key PD activity that could serve their hopes for what the PD would provide, even though demo lessons, as such, were not explicitly part of the LL cycle of professional learning proposed by the research team.

As we discuss in the next section about researcher expectations for the PD, we were open to the idea of demo lessons, but our view of them resonated more with the "Try It Out" phase of a LL, representing an opportunity for a member of the research team to "go first" in enacting some co-planned or co-imagined lesson, instructional practice, or routine. Our coding and analysis of the notes from this first conversation with our administrator colleagues, showed the murkiness of what "demo lesson" could mean in the PD activities, likely due to the layered goals both administrators and researchers were bringing to the table. For administrators, they were sharing their perceived needs for instructional support for teachers, while affirming our presence and acknowledging our assumed expertise. We were eager to be responsive to the needs and instructional goals of the new administrators and build trust and relationship with them. When discussing what we could do together and reacting to the LL cycle, the principal and assistant principal remarked that their teachers "love watching experts teach," thus positioning any teaching that we would do in classrooms as exemplary, something that teachers should "watch" and not necessarily participate in. In this way, we and our administrator colleagues were oriented differently to what it meant for university-based literacy researchers to be involved in classroom enactments at the school. These different orientations represent one layer of

complexity in the partnership-building process, posing implications for how teachers understood and approached our work together.

Researchers' Expectations

Across all stages of building the partnership with teachers and administrators at EBE, our hope was to create PD with our partners that would challenge traditional notions of PD that can tend to promote a sit-and-get model, be located at a distance from classroom practice, and position university teacher educators as experts who hold knowledge and teachers as those needing to receive knowledge. Rather, our goal was to engage a collaborative process of professional learning that viewed knowledge-producing as reciprocal and shared, positioned all participants as holding expertise, was driven by teachers' learning goals, and occurred in the context of classroom practice. In addition to learning about the process of building a partnership across regions of the state and around this vision for collaboration, we also wanted to gain insight into how such approaches to professional learning might support teachers against a policy landscape shaped by SOR-inspired mandates.

In our very first introduction to EBE teachers, which took place in January 2022, following the December 2021 meeting with the former principal and superintendent, we presented a graphic representation of a LL and a list of some features we hoped would characterize the PD we created with teachers, such as, "opens possibilities for co-teaching and co-observation," "helps the READ Act training come to life in your classroom," and "is collaborative and aligned to goals that matter most to you."

One month after this introduction to the partnership, with a group of about eight of the thirteen total teachers who self-selected into the partnership, we proposed some norms to guide the work that we hoped reflected the collaborative, mutualistic vision we held for the PD, including: "it is okay to share ideas in progress and revise your thinking (experimentation not

performance!), collaboration not feedback, [and] no one's teaching is ever being evaluated" (Launch Agenda, 2/3/22). These two example artifacts–the list that communicated our vision for co-designed PD and an excerpt from our proposed norms–reflect our efforts to articulate our expectations of the partnership and what PD collaborations might accomplish. As discussed previously, there were subtle ways in which these expectations departed from what administrators expected of the partnership, especially in terms of demo lessons.

In noting that teachers "love to watch experts teach," administrators implicitly framed any teaching we, as researchers, might do in classrooms as exemplary. Internally, our team struggled with this framing, not just because it existed in tension with our hopes for the PD, but also because it seemed to suggest that we were more knowledgeable than our teacher partners about things we were still learning at the school. As we wrote to one another in a memo in January 2023:

> Even though the promise of doing demo lessons was a way to get our foot in the door and build rapport with the new admin, it feels weird for us to teach a demo or model lesson for the benefit of teachers who know the curriculum better than we do, know their students better than we do, and have more experience at the school than we do (Researcher Memo, 1/30/23).

In the course of building the partnership, then, one tension that came to the surface was between the expectation held by administrators on the one hand that we, as university-based researchers and supposed experts in the SOR, should deliver professional learning opportunities to teachers by modeling exemplary teaching, and our vision for the partnership on the other, which saw PD as co-built with teachers and expertise as distributed among all participants.

After discussing this tension as a team and exploring what was contributing to it, we endeavored to reframe demo lessons as one of multiple ways we might learn in partnership with one another. In practice, we found that this attempt to reset and reframe expectations of the partnership, particularly related to demo lessons, did not address the assumption of our

instructional expertise quite as much as we hoped. We did complete four LL cycles during the remainder of the 2022-2023 school year, after attempting to reframe demo lessons as one option on a menu of ways we might learn together, such as through co-teaching, co-observation, and video analysis. Yet in each LL, the default scenario continued to involve someone from our team leading a small group reading lesson while teachers from the participating grade level watched and took notes. On the surface, then, it appeared that the assumption persisted that we, the literacy researchers, would demonstrate exemplary teaching. However, we also found that over time, some of our practices and routines began dismantling that assumption, including spending more informal time in classrooms to strengthen relationships with teachers and children, seeking out and celebrating teachers' own expertise, and simply asking teachers to launch lessons in LLs once they felt comfortable.

Teachers' expectations

The teachers with whom we worked at EBE were navigating the administrator expectation that the partnership would fill pressing gaps in teacher knowledge and practice and the researcher expectation that the partnership would provide non-traditional, collaborative, teacher-driven PD. Upon being introduced to the idea of the LL cycle and the Teacher Time Out (TTO) routine during our first introduction to the EBE teaching staff in January 2021, a number of teachers seemed to appreciate and endorse the notion of school-embedded, active PD that departed from the style of one-time trainings or workshops. When we shared a video recording of a TTO from another school-university partnership, a number of teachers reacted positively to the idea of being able to make instructional decisions collectively and in real time. Responding to the video, one teacher remarked that the TTO routine made a lot of sense to her because "two heads are better than one" when deciding on the next instructional move (Field Notes, 1/26/22). In this way, teachers expressed initial openness to the researcher vision of the PD partnership,

but a number of factors interacted to cloud what teachers themselves wanted or could expect from the partnership.

One such factor, discussed previously, derived from the general sense that EBE teachers should learn by observing model instruction (e.g., the principal's comment that "they love watching experts teach."). As illustrated by the "Try It Out" phase of the LL, our hope as researchers was always to co-enact classroom instruction with teachers, pooling the collective pedagogical expertise held by our own team and the teachers who knew their students, school, and curriculum best. This expectation of researchers to share classroom enactments with teachers came into tension with the teachers' instinct to sit and watch what they assumed to be exemplary instruction, an instinct that may have been encouraged by administrator framing of the PD and by our team's familiarity with the instructional practices teachers were expected to enact. A brief reflection on the shape of each LL cycle from Spring 2022 into Fall 2022 illustrates how the tension developed and grew.

After viewing the video of the TTO in January 2022, we facilitated a co-planning meeting with participating teachers, but not until March because of how often inclement winter weather prevented our commute to the school. This co-planning meeting represented the "Identify Relevant Resources" phase of our LL cycle, with one team of kindergarten and first grade teachers having co-planned a lesson on mapping sounds to letters in regularly and irregularly spelled words and another team of second grade teachers having co-planned a lesson on a reading comprehension strategy to describe character thinking. Members of the research team volunteered to "go first," or launch the lesson, although we made plans internally to pause the lesson through a TTO in case the teachers did not yet feel comfortable doing so. The enactment of those co-planned lessons happened in April 2022, with researchers mostly leading the lesson and teachers mostly watching.

Then, during the next school year, 2022-2023, our attempts to relaunch the partnership were gradual, situated within the far-reaching changes at the school, including the new administration team. The new administrators asked if we could focus our collaborations with particular grade levels, namely first and second grades, rather than proceed with our open invitation model from the year before. We were happy to make that shift, as it felt responsive to the school's needs and those grade levels included some of our most engaged teacher partners from the previous spring. Scheduling was an additional layer of change from spring to fall. The previous principal had scheduled time for PD after school each month and had given us that time to meet with teacher partners, whereas the new principal took different approaches to scheduling all-staff meetings and organized school schedules to provide time for grade level collaborations during the school day.

With these shifts, we found that scheduling conflicts made it difficult to find a time for a co-planning meeting with partner teachers, but after the principal's enthusiasm for demo lessons and the teachers' interest in co-observation, we wanted to get into classrooms as soon as possible. This motivated an adjustment to our original vision of the LL cycle: rather than planning with teachers, as originally envisioned by the LL cycle, we asked participating teachers to share their instructional learning goals with us, we planned a sample lesson focused on the skill or strategy teachers wanted to work on, and then we visited classrooms. During those visits, members of our team taught the lesson, while two teachers and one of us observed. This departure from the LL was motivated by our desire to dig into work with teachers after the pace of the PD partnership had lagged due to the change in leadership and a delay to the start of the school year because of construction. Although modifying the sequence of the PD activities in this way seemed justified at the time, we found that it had consequences for how teachers conceptualized the work and what they expected of the partnership.

Mainly, our challenges with scheduling and subsequent decision to circumvent the co-planning phase of the LL cycle further solidified teachers' penchant to see us as instructional experts, to label our teaching as exemplary, and to defer to us. Although we found opportunities for one of us to initiate TTOs during some lessons, in the five LLs we completed during the 2022-2023 school year, teachers continued to take the role of observers without initiating a TTO or sharing in decision-making during instruction. In an email communication with the second-grade lead teacher about re-launching the partnership, she wrote, "It will be great to have your feedback and input on what we're doing and how we can do it better!" (Email correspondence, 11/14/22). While this sentiment reflected our desire to support teachers in growing their practice, we also found that it implied a coaching or evaluative dynamic in which the teacher expected our team to identify supposed gaps in instruction and remediate those gaps from our vantage point as literacy experts. This expectation on the part of the teachers may have been connected to two factors: (a) researchers' decision to adjust the LL cycle, thus obscuring key parts of our original vision for the PD, and (b) the administrator team's suggestion that watching experts teach was both what teachers desired and was most effective for their learning.

Tensions in expectations

Studying our processes for building partnership with rural educators across geographic distance has revealed the multiple layers of tension between what administrators, researchers, and teachers expected from the work together. Each of those layers is also embedded not just within the policy landscape of elementary reading education, but also challenges particular to rural schools, such as, in our case, geographic distance, including time and weather, and the significant shifts the district and school experienced during the process of building the partnership, including new administrators with different priorities and changes to the school schedule. As we have described, administrators tended to view the PD as a means to target what

they saw as pressing pedagogical problems in instruction (in relation to SOR-inspired, new emphases in the teaching of reading). As literacy researchers and teacher educators, we viewed the PD as an opportunity to center teachers' instructional goals and offer a learning partnership that was collaborative, embedded in practice, and challenged hierarchies of expertise. Teachers, located between these viewpoints, had to keep up with what the PD was supposed to be and entail, even as we modified the structure for professional learning, further muddying the waters. This situation may, in part, reflect how our partnership experienced challenges in achieving coherence, a feature widely regarded as one cornerstone of effective PD that involves basic agreement between state/district goals, administrator priorities, and the specific content or design of a PD program (Kennedy, 2016). Understanding such tension and the sources of it, which we turn to in our discussion, illuminates some of the complexities that can arise in building research practice partnerships, particularly in the context of rural schools and state policies that create an imperative to swiftly change longstanding approaches to literacy instruction.

Discussion and Implications

We contend that there are two main lenses through which to view our findings about partnership building processes at EBE, representing two avenues for answering our research question about how elementary teachers and university researchers build partnership across geographic contexts toward collaborative school-embedded professional learning. First, we suggest that administrator, teacher, and researcher reactions to the prospect of working together on instructional practice in reading are deeply shaped by and cannot be separated from the intensive policy context that currently exists around elementary reading education in the U.S. Second, we characterize the role we assumed as partners in terms of the ways we strove to mediate policy mandates and requirements, thus answering the call made by other literacy researchers (e.g., Woulfin and Gabriel, 2020) to impact reading instruction by studying teachers'

relationship to curriculum and PD, rather than focusing solely on their personal levels of content knowledge (or lack thereof).

Situating partnership expectations within the policy context

As we described in our findings, many of the complexities in building our RPP were driven by tensions between administrators' hopes for PD and researchers' vision for collaboration, tensions that teachers navigated while building relationships with us and participating in the early stages of work together. We assert that these tensions in what administrators, researchers, and teachers hoped reading PD would achieve is intricately connected to an intensive policy context around elementary reading education, which exerts immense pressure upon practitioners to overhaul the ways they teach children to read and locate themselves on the "right" side of a constructed binary between effective and ineffective methods for teaching reading.

The SOR figures prominently into this intensive policy context, inspiring legislation in many states in the U.S. so far (Schwartz, 2024), including ours. As we discussed, Colorado's READ Act draws on the SOR to attempt to catalyze significant pedagogical change (Cox and Johns-O'Leary, 2024). Like many SOR laws, the legislation assumes that state-issued requirements around curriculum and teacher training will "ensure that students educated in the public schools… consistently receive evidence-based instruction that is proven to effectively teach children how to read" (CDE, 2019). In this way, research from the SOR has been instrumentalized to reform the way teachers are trained and the way reading is taught in U.S. public schools. The objective of such reform is to achieve congruence between how children are taught to read and how the brain learns to read, according to scientific evidence. The reach of the reform is vast, with the same expectations for fidelity regardless of district size, capacity, and geographic location. Our own and our partners' mutual enthusiasm for the partnership connects

to the demands and stakes of the policy and our desire to support teachers with those policy expectations through the kind of practice-based professional learning that is often less accessible to rural schools. However, the policy push to pivot reading instruction quickly influenced how teachers and administrators developed expectations about what PD with us could entail.

We see two specific tendencies or features of the policy climate as particularly salient for understanding how and why the tensions in expectations about PD emerged in the ways they did with our EBE collaborators. First, the wave of reform in reading education, galvanized by the SOR, has ushered in narratives about teachers, their skills, and how much they know or do not know about teaching reading. For example, Louisa Moats, a central contributor to the International Dyslexia Association's Knowledge and Practice Standards for teachers, has insisted that expert teaching depends on a teachers' knowledge of word-level language structure, knowledge which does not, in her view, receive adequate coverage in most teacher education programs (Moats, 2014). Relatedly, media portrayals of the SOR and reading reform can, as MacPhee et al. (2021) explain, construct a sense of crisis, metaphorically framing reading education as war and the educators who do not enthusiastically or readily subscribe to SOR as a moral and political enemy. As these examples illustrate, there is a growing sense in research, policy, and public discussion that teachers do not know enough of "the science" behind learning to read.

We must consider our EBE administrator colleagues' desire to have their teachers "watch experts teach" against the backdrop of this policy climate and media narrative that there is a problem with how teachers teach children to read (e.g., Hanford, 2018). A particularly influential aspect of that narrative is the construction of binaries (Yaden et al., 2021) that draw defining lines between effective, science-based, acceptable methods for teaching reading, compared to ineffective, debunked, unacceptable methods for teaching reading. Administrators and teachers

are confronted with the urgent need to locate themselves on the "right" side of those binaries, an urgency that is stoked by mandates from the CDE and by the risk of being personally implicated in narratives that "position teachers as struggling and have suggested that they are to blame for failing students" (Wetzel et al., 2020, p. 327). Each of these layers of pressure, arising from reading education policy, the media, and elsewhere, amplifies a priority long held by many rural schools, to place highly effective teachers in classrooms, even as it remains incredibly challenging to recruit and retain teachers in many rural locales (Barrett et al., 2015).

To be a teacher and instructional leader in reading education today is to feel the weightiness of the need to change, update, or transform teaching practice to demonstrate alignment between one's practice and the scientific evidence base from the SOR. It is to feel that you must implement with gusto particular methods for teaching reading that have been identified as evidence-based, or else be cast as part of the problem in U.S. elementary students' continued struggle with reading. This is the prism through which we must consider our teacher and administrator partners' expectations for PD. Their assumption that the partnership work would allow them to see SOR-approved, evidence-based instruction modeled by instructional experts is an illustration of how those closest to education policy are impacted by it. The landscape of SOR policy and the narratives it promotes structured our partners' understanding and desires related to the kinds of collaborations that would be possible with literacy researchers. In a climate that implies the ever-present need to remediate teachers' supposed gaps in content knowledge, our teacher and administrator colleagues seemed to gravitate toward being shown the "right" way to teach reading, rather than, for example, devising ways for instructional expertise to be distributed across researchers and practitioners. We see this as a manifestation of elementary reading policy that deserves ongoing analytic attention.

Our role: Mediating policy mandates and narratives about teachers

As literacy researchers seeking to learn about partnership building processes, we include in our inquiry how we responded to the tensions between ours, administrators', and teachers' expectations of the partnership, remembering that those expectations were shaped by the policy landscape of elementary reading education. Specifically, we characterize the role we endeavored to take as one involving mediation: we tried to occupy an in-between space, between state-required mandates and the teachers and administrators who felt such pressure to comply with them.

An illustrative example can be drawn from our team's decision-making upon discovering that the school's reading curriculum, HMH's *Into Reading* appeared on CDE's advisory list of approved curriculum, but, at the time, only partially met expectations for alignment with the SOR (it has since been updated). The position occupied by this curricular program represents an occasion in which the SOR's penchant for neatly drawing binaries between effective and ineffective becomes more complicated: the curriculum was neither entirely based on SOR approaches nor entirely discredited by that SOR stance. The curriculum's designation as partially meeting expectations meant it was somewhere in the middle. This also introduced some issues and challenges in the principal and assistant principal's hope that PD with us would lead teachers toward implementing the curriculum with fidelity, for by the state's own admission, following this particular curriculum to the letter would not fully conform to the legislated intent to improve the quality of reading instruction for students or strengthen teachers' content knowledge in SOR-informed methods. Our course of action upon making this discovery about *Into Reading* (which involved email communication with administrators, as described in the Findings section) represents our attempt to give voice to an instance in which the line separating "good" and "bad" reading curriculum becomes blurry, even as practitioners carve that line to guide their implementation of state-mandated instructional practices.

Making transparent the ways in which a program like *Into Reading* defied the neat categorization that often accompanies SOR dialogue is a crucial step in collaborating with teachers, advocating for teachers, and joining them in better understanding the implications of policy for everyday practice. Additionally, it can contribute to an emerging research agenda, urged by researchers like Woulfin and Gabriel (2020), who outline an "interconnected infrastructure for improving reading instruction," contending that curriculum, as a pillar in that infrastructure, is one lever in aligning teachers' practice with SOR. As they explain, we need to continue studying and analyzing the role reading curricula can play in building educators' understandings of how to teach reading, a possibility to which we remained open by striving to join our partners in making sense of HMH's misalignment with the SOR.

Analyzing our processes for building partnership with the teachers and administrators at EBE brought to the surface tensions between what we, administrators, and teachers hoped literacy PD could achieve. This paper is a first step in enumerating some of those tensions, but broadly we see the tension as existing between our desire to position teachers as knowledge-holders and instructional experts in their own right, and an era of SOR reform that creates a policy context that positions teachers as "in need of change," implicitly assuming there is something wrong about what they are doing when it comes to reading instruction. In mediating within that tension, we learned about how to serve as responsive partners to in-service teachers, by, for example, recognizing that we inadvertently sent some mixed messages about the central roles and practices of the partnership. Through it all, we aimed to remain responsive to administrators' school-wide goals and teachers' felt needs in order to live out the collaborative, reciprocal vision for the joint work. Bringing that vision to life at EBE has been nuanced, holding some complexities and some successes, and demonstrating how issues of "coherence" in professional learning (Kennedy, 2016) must be viewed as iterative and collaborative in place-

based, multi-year partnerships. We believe understanding our continuing partnership and the processes for building it can illuminate some of the on-the-ground consequences of SOR reform and contribute to the field's understanding of creating, sustaining, and studying RPPs.

Chapter 5: Professional Development, Curriculum, and Leadership: The "Pillars" in Action at a Rural Elementary School Working to Improve Reading Instruction

The Science of Reading (SOR) is "a multidisciplinary body of scientifically based research about reading" (The Reading League, 2021) that continues to inspire reform in schools and districts across the United States. This reform movement is defined by its proponents' deeply felt goal to transform the quality of elementary reading education, a goal made even more pressing as the news media continues to portray a literacy crisis (MacPhee et al., 2021). In media reports, policies, and public discussions about reading education, the crisis appears to be fueled, in part, by teachers who supposedly are not knowledgeable enough about the best methods for teaching reading (Wetzel et al., 2020). Given this sense of urgency and problematization of educators' knowledge and practice, it is particularly important to study how schools and districts work to change reading instruction. Such inquiries can also illuminate possibilities for eliminating deficit framings of teachers and students by deliberately turning attention beyond individual teacher practice and toward "the system and school conditions that affect reading instruction and reform" (Woulfin & Gabriel, 2020).

In this paper, I explore how three of those conditions—professional development (PD), curriculum, and leadership—figured into one rural elementary school's journey toward implementing SOR-aligned, state-mandated practices for teaching reading. The school, East Bridge Elementary (EBE, a pseudonym), is the site of a multi-year PD partnership between university-based researchers and elementary educators and administrators. PD, curriculum, and leadership are organizational conditions that have been called "pillars" in an interconnected infrastructure for improving reading instruction because of how meaningfully they underpin far-reaching instructional change (Woulfin and Gabriel, 2020). By devoting analytic attention to

these pillars, I aim to foreground system-level factors that are often de-emphasized in SOR debates. Doing so also opens possibilities for a more holistic approach to strengthening reading instruction in schools and resists the current tendency to focus only on individual teachers. This paper represents one step toward elucidating such a holistic, systems-minded approach by examining the following research question: How do PD, curriculum, and leadership function in a small rural elementary school's path toward improving instruction and implementing SOR-inspired, state-mandated practices for teaching reading?

Review of the Literature

In this section, I situate my analysis within three main areas of the literature, each of which informs my inquiry regarding how PD, curriculum, and leadership figured into EBE's process of enacting SOR-inspired, state literacy policy. First, I define the SOR and provide an overview of its role in elementary reading policy, including Colorado's SOR legislation. Then, I summarize some documented trends in how teachers have negotiated similar kinds of state education policy. Finally, I synthesize voices in the field that have examined how the SOR, media representations of the SOR, and SOR-inspired policy have produced distinct narratives about teachers, as these narratives form the backdrop of EBE's attempts to improve reading instruction.

Elementary Reading Policy and the SOR: A Brief Overview

The SOR is a body of research that has inspired elementary reading policy in 40 states and the District of Columbia (Schwartz, 2024), including Colorado's Reading to Ensure Academic Development (READ) Act. SOR studies extend back multiple decades (e.g., Ehri, 1987) and often use scientific methods to identify which cognitive skills are relevant to reading, without always explaining how or when to teach them (Jensen, 2021; Seidenberg et al., 2020).

As such, the SOR is neither a curriculum, an educational product or program, nor an instructional approach, but a corpus of scientific studies about reading that has figured prominently into state elementary reading policy.

Colorado's SOR-inspired legislation, the READ Act, was first passed in 2012 and updated in 2019. It pursues a stated objective to "ensure that students educated in the public schools… consistently receive evidence-based instruction that is proven to effectively teach children how to read" (Colorado Department of Education (CDE), 2019). The SOR is directly implicated in this policy goal, as the READ Act updates issued two main requirements: first, that Colorado school districts adopt their reading curricula from an advisory list of state-approved programs found to be sufficiently aligned to the SOR, and second, that all K-3 public school teachers complete 45 hours of training in evidence-based techniques for teaching reading (CDE, 2019). These mandates around curriculum selection and teacher training thus draw on the SOR evidence base to catalyze significant pedagogical change in Colorado classrooms. That change, according to the policy, will be observable through outcomes on assessment data such as state standardized tests or interim assessments identifying students who have a significant reading deficiency (CDE, 2023). However, the core actions mandated for schools and districts leave room for nuanced and varied application of asset-based pedagogies and humanization of teachers themselves amid the call for change.

Trends in Teachers' Negotiation of Policy and Impacts for Instruction

Over many years, classroom- and school-based research has revealed some trends in the experiences of teachers striving to center asset-based pedagogies in the midst of top-down policy like the Colorado READ Act or reform movements like the SOR. The teacher in Stillman and Anderson's (2015) study, for instance, grappled with her state's accountability measures,

leveraging “ideological clarity” about her students’ cultural and linguistic assets to make her own goals compatible with policy goals around achievement and skill remediation. Similarly, the literacy coach in Zoch's (2015) study faced policy pressure to improve test scores and reconciled such pressure with her own values by integrating test-taking objectives into culturally responsive literature. In both cases, teachers found strategic ways to comply with policy requirements while living out their personal and professional commitments. Studies like these elucidated the complex intersection between teachers’ identities, agency, and their appropriation of policy in a local context. This intersection is relevant for any study of critical, humanizing efforts to improve instruction, including those at EBE.

The SOR, policy, and resulting narratives about reading and teachers

To explore the pillars of PD, curriculum, and leadership in action at EBE, it is key to recognize the narratives about reading and the teaching of reading that have accompanied SOR reform in Colorado and beyond. In terms of reading itself, Jensen (2021) notes that the studies considered part of the SOR most often operate from a positivist paradigm. As such, they seek to establish generalizable patterns about how teach all children to read, thus sidelining other, more interpretivist or sociocultural questions like, “How do students in particular contexts construct meaning as they read (Jensen, 2021)?” Similarly, Vaughn et al. (2020) outline the ways in which the SOR and related policies position learning to read as an enterprise that involves simply acquiring a set of decontextualized skills. Such a view of reading reduces the student’s role to a passive receiver of skills and the teacher’s role to a rote executor of prescribed curriculum, rather than an expert in adaptive teaching. With its positivistic affiliations and skills focus, SOR reform risks painting a narrow picture of what it means to read, a picture that omits issues like equitable, culturally meaningful, or adaptive teaching.

These assumptions about reading layer onto narratives about those who teach reading. One such narrative, circulated in the media through reports like Emily Hanford's (2018), suggests a linear, roughly causal relationship in which gaps in teacher educators' knowledge about the SOR create weaknesses in teachers' quality of instruction, which creates poor scores on standardized reading assessments (Wetzel et al., 2020). Relatedly, findings from MacPhee et al.'s (2021) study showed that media portrayals of the SOR mapped salient characteristics of a metaphorical source (war) onto a target (reading) to create the conceptual metaphor that reading is war, with the implication that educators who do not subscribe to science-based practices are enemy combatants. As these studies illustrate, interactions between the SOR, reading policy, and media coverage can cultivate a pointed narrative about teachers, including the idea that teachers who are not knowledgeable enough about the SOR are part of the problem with reading achievement in U.S. public schools. These messages about teachers and their SOR knowledge (or lack thereof) are intertwined with, and cannot be separated from, EBE's efforts to improve reading instruction in their building. Appreciating the depth and sway of such deficit framings of teachers is therefore paramount both in studying this particular school's journey toward instructional improvement and in illuminating ways in which the SOR might be integrated with asset-based approaches to research and instruction.

Guiding Theories

To guide my study, I draw on three conceptual lenses. First, I ground this study in a question about PD, curriculum, and leadership because they are the system-level conditions that meaningfully relate to far-reaching instructional change in schools and districts (Woulfin and Gabriel, 2020). Woulfin and Gabriel (2020) called PD, curriculum, and leadership pillars in "an interconnected infrastructure for instructional improvement" (p. 109), explaining that attention to

these pillars can resist the tendency in SOR debates to myopically focus on individual teachers. The first pillar, PD, contributes to system-wide improvements in reading instruction because it can build teachers' capacity to change their practice and impact student outcomes (Penuel et al., 2007). The second pillar, curriculum, is aimed toward shaping how teachers think about what they teach and how they teach through elements such as the scope and sequence of topics to be covered, how those topics will be assessed, whether and how materials represent diverse identities and communities, and more (Brown & Brown, 2015; Rasinski et al., 2009; Valencia et al., 2014). Assessment, an additional organizational factor in instructional improvement, is thus connected to the pillar of curriculum. Leadership is the final pillar: school and district leaders' decisions in setting a vision for reading instruction, offering PD opportunities, and selecting curriculum shape how teachers go about their work and engage in reform efforts, including SOR reform (Coburn, 2006; Woulfin, 2015).

The second conceptual lens for this study is drawn from critical studies of policy. These studies clarify that policymaking, including the passage of SOR-inspired legislation in Colorado, is a political, and not a rational, activity (Allington, 1999). Further, these critical perspectives on policy establish the complexity of translating policy into action at the local level. Spillane (2004) described this process as interactive policymaking, wherein local officials build their own understanding of policy in order to "decide whether to ignore, alter, or adopt policy makers' recommendations" (p. 6). To appreciate how a policy leads to change, I consider what those most connected to policy implementation–i.e., school leaders and teachers–think the policy means and requires (Spillane, 2002; Hikida & Taylor, 2023). This insight directly motivates my methodological choices, which aim to capture teacher and administrator perspectives on how PD,

curriculum, and leadership work to support their efforts to improve reading instruction and implement SOR-aligned practices.

Finally, I draw on theories of teacher learning from practitioner inquiry. These theories complement my other conceptual lenses, illustrating that any endeavor to reform reading education, change teacher practice, and grow teacher knowledge is complex and multilayered. As (Hikida & Taylor, 2023) explain, practitioner inquiry does not conceptualize change in schools as dependent on or produced by specific practices, such as the instructional practices included in the READ Act's 45-hour training on evidence-based methods for teaching reading. Rather, practitioner inquiry directs attention to the myriad of "ways and contexts within which practitioners deepen their understandings of how children learn… and rethink practice, which includes, but goes well beyond, the specific strategies teachers use in classrooms" (Cochran-Smith & Lytle, 2009, p. 57). Thus, practitioner inquiry contributes to this study a key conceptual insight, namely the recognition that changing teacher practice, improving instruction, and reforming U.S. reading education is not as simple as ensuring that a certain set of practices are employed universally in classrooms.

Instead, any reform effort, including EBE's journey toward improving reading instruction, implicitly contains a set of assumptions about what teachers know and what they do. Practitioner inquiry demands that such assumptions be interrogated. Excavating assumptions in this way is especially important in a reform movement like the SOR, which is oriented around the core goal of making U.S. reading education better. This goal can appear to be neutral, common-sense, and "good." Do I, as a former elementary teacher, a literacy researcher, and a teacher educator feel personally and professionally invested in this goal of making U.S. reading education better? Yes, I do, and I see the teaching methods associated with the SOR as integral.

Yet, amid the felt "goodness" or "righteousness" of this goal, a pressing question remains: How are teachers positioned in, by, and through legislation that includes mandates about teacher training and curriculum selection, and how can critical analysis ensure that SOR policies are implemented in service of equity?

Cochran-Smith and Lytle (1999) help address those questions by outlining three distinct conceptualizations of teacher learning, which hold particular salience for this study and the SOR policy landscape. Each concept is distinguishable not necessarily in terms of the methods it uses to elicit teacher learning, but in terms of the picture it paints about what it means for teachers to "know more" (i.e., knowledge) and "teach better" (i.e., practice) (Cochran-Smith & Lytle, 1999, p. 249). The first conceptualization, called *knowledge-for-practice*, assumes that there is a formal knowledge base about how to teach well that is produced through traditional scientific methods and must be made accessible to teachers through pre-service teacher education and in-service PD (Cochran-Smith & Lytle, 1999). In contrast, the second conceptualization of teacher learning, *knowledge in practice*, assumes that what teachers need to know to teach well can be located within exemplary teaching practice, and that teachers learn by studying the actions and decisions of expert educators and then applying those approaches to their own practice. The third conceptualization, *knowledge-of-practice* suggests that the knowledge needed to teach well comes from teachers themselves when they conduct collective, systematic inquiries not just into the everyday work of teaching but also into larger social and political structures that shape what it means to teach and learn.

Despite its age, Cochran-Smith and Lytle's (1999) framework compellingly attests to the consequences of how we conceptualize what it means for teachers to learn and to know enough to teach well. The differences between each conceptualization of teacher learning represent

important and distinct answers to theoretical questions about what knowledge is, how it is acquired, and how it relates to practice. In my analysis, Cochran-Smith and Lytle's (1999) three conceptualizations served as useful heuristics for exploring EBE teachers' talk about their own learning and about how PD, curriculum, and leadership might facilitate holistic and equitable instructional improvement in their school.

Context for the Study, Participants, and Researcher Positionality

This study was conducted during a three-year PD partnership between a university-based team of literacy researchers and EBE, an elementary school in eastern Colorado. The research team consisted of two teacher educators and literacy researchers who work at a large flagship research university in a metro area of the state. I am a white, cis-gender, straight doctoral candidate with seven years of experience in elementary classrooms, first as a K-1 teacher and then as an instructional coach. The other member of the research team is a white, cis-gender, straight professor and former elementary teacher with more than 20 years' experience as a university teacher educator partnering with classroom teachers and students. The PD partnership began during the 2021-2022 school year when our research team cultivated relationships with a consortium of rural school districts in eastern Colorado. Through our contacts within this consortium, we began our first year of partnership work with EBE in the 2022-2023 school year, conducting monthly visits to the school to work on literacy practice with first and second grade teachers. 2023-2024 brought a more consistent cadence of partnership activities, with our research team sustaining a twice-weekly presence at the school, working intensively with the second-grade teaching team, participating in professional learning communities and other meetings, and occasionally facilitating whole-staff PD sessions. Throughout all phases of the partnership, from its inception to the present, the goal has been to collaborate with our teacher

and administrator colleagues at EBE to create school-embedded professional learning opportunities that support enactment of SOR-aligned instructional practices.

EBE is located in a rural town of 3,013 residents that is about 60 miles east of our university campus (U.S. Census Bureau, 2019). The town and surrounding community have experienced rapid population growth in the past five years. This growth has included more school-age children who are first- and second-generation immigrants, primarily from Mexico and Central American countries, creating a need for EBE to rapidly expand support for English Language Learners. According to publicly available student demographic data from the 2024-2025 school year, 544 students attended EBE in the latest year of reporting (CDE, 2025). 15.1% of those students have been identified as English language learners and 39% qualify for free or reduced-price lunch. According to CDE, of the 544 total students, 312 are White, 197 are Latino, 7 are Black or African American, 4 are Asian, and 24 are Two or More Races (CDE, 2025).

The principal and four teachers who volunteered to participate in this study are women, and the assistant principal is a man. All participants are white, and three of the teachers—April, Theresa, and Sophie—came to teaching as a second career. All four teachers taught second grade and worked together closely on lesson planning, family communication, and other shared teaching tasks. 2023-2024 was Theresa's first year in the classroom, Sophie's fourth, April's eleventh, and Kay's twentieth. It was the principal, Kristy's, second year in her role and the first year for the assistant principal, Carter. The second-grade team of teachers opted in to a research component of the PD partnership, agreeing to serve as participants in this study.

Methods

I drew on tools from the tradition of ethnography to capture participants' views, perspectives, and meaning making (LeCompte & Schensul, 2010). Following the ethnographic recommendation for "immersion in the field situation" (Spindler, 1997), I spent two days per week at EBE during the 2023-2024 school year, which is the focal year for this analysis. Data collection occurred consistently as I led and participated in formal and informal professional learning through the larger PD partnership, including collaborating with second grade colleagues as they enacted SOR-aligned practices, immersing myself in the everyday life of four second grade classrooms, and sitting in on committee meetings that reviewed prospective literacy curricula for the upcoming school year. The dataset for this analysis includes the data sources listed in Table 2, which were collected across the school year and correspond to each of the pillars. For this analysis, all video and audio recordings were professionally transcribed.

Table 2. Pillars and data sources

Pillars	Data Sources
PD	Three-times yearly interviews with participants Field notes and audio recordings of school-embedded PD Field notes and audio recordings at a local literacy conference PD artifacts such as co-taught lesson plans Video recordings of co-taught classroom enactments
Curriculum	Interviews with participants Field notes and audio recordings of curriculum committee meetings Curriculum artifacts such as the state board of education's (SBE) advisory list of approved reading curricula Informal, anonymous schoolwide survey about teachers' use of their current curriculum
Leadership	Interviews with participants

Data analysis

My analysis involved cyclical deductive and inductive coding processes. To discern how PD, curriculum, and leadership functioned in teacher and administrators' talk about improving instruction in their building, an initial round of deductive coding identified all moments in which participants explicitly invoked one of the system-level pillars. In other words, I first coded excerpts of transcripts, field notes, and artifacts with the purpose of categorizing textual data according to what Saldana (2015) called "descriptive codes," one for each pillar: PD, curriculum, and leadership. Toward analysis of nuances within each pillar, subsequent rounds of inductive coding resulted in substantive categories (Maxwell, 2012), which more deeply described what participants said and did to capture their own meanings about PD, curriculum, and leadership. The following sections overview the coding scheme, first by pillar and then for substantive categories within each pillar.

Initial Coding by Pillar

In the initial round of coding, I used the general descriptive code, *PD* to tag moments where teachers spoke about professional learning experiences they had previously or desired in the future, any topics about which they wanted to learn, and/or formal trainings to which they hoped to have access. I assigned the descriptive code *curriculum* to any excerpt of textual data in which teachers or administrators discussed curriculum in general (i.e., what any literacy curriculum should do or make possible), the school's current curriculum, Houghton Mifflin's *Into Reading* (abbreviated HMH), or prospective literacy curricula to be adopted in future school years. Finally, the initial coding applied the descriptive code, *leadership,* to catalogue any moments in which teachers or administrators talked about school leaders (principal, assistant principal, grade level leads) in the EBE building. As Woulfin & Gabriel (2020) point out when

enumerating leadership as one of the pillars in an interconnected infrastructure for instructional improvement, "leaders use their power, position, and agency to motivate changes in the nature and quality of reading instruction" (p. 113). Therefore, the first round of coding, as well as the following rounds, attended carefully to how teachers described school leaders' vision for reading instruction at EBE.

Coding within pillars

To move from a general labeling of moments when participants invoked PD, curriculum, or leadership to more closely capturing the complexities within each pillar, I engaged two additional rounds of coding. These subsequent rounds drew on Cochran-Smith & Lytle (1999)'s conceptualizations of teacher learning to generate the following codes related to PD: *knowledge, seeing it in action,* and *learning from each other*. They also decomposed the general *curriculum* code into the subcategories: *supplementing the curriculum, grade level expectations, differentiation, norming and cohesion,* and *vertical alignment*. Two codes arose within the leadership pillar: *accountability and follow through* and *the freedom versus consistency paradox*. Table 3 defines each of these inductive codes by pillar.

Table 3. Inductive codes within PD, Curriculum, and Leadership Pillars

Pillar	**Code**	**Explanation**
PD	Knowledge	Learning by gaining access to some kind of formalized knowledge base
	"Seeing it in action" (in vivo)	Learning how to teach by watching someone else teach or by seeing certain teaching practices be applied in a real classroom setting
	Learning from each other	Learning by pooling collective knowledge and expertise OR by co-teaching
Curriculum	Supplementing the curriculum	Drawing on instructional resources external to the school's official curriculum (e.g., the popular website Teachers Pay Teachers)

	Grade level/high expectations	Maintaining high academic expectations for students and not losing sight of what "grade level" is
	Differentiation	Adjusting content to fit the needs of individual or groups of students
	Norming and cohesion	Getting certain things to be the same across classrooms, grade levels, and the entire school
	Vertical alignment (in vivo)	Ensuring that what is covered in one grade maps well onto what is expected in the next
Leadership	"Accountability" (in vivo) and follow through	The need for leaders to ensure that teachers are doing the things asked of them.
	Freedom versus consistency paradox	The tension between on the one hand, allowing teachers freedom to do what they think is best and on the other, ensuring some practices are consistent whole-school.

Findings

Data analysis across the 2023-2024 school year revealed one set of findings related to the pillar of PD and another set of findings related to curriculum and leadership.

PD Findings: Knowledge and Practice in an SOR Era

In interviews, informal conversations, and other interactions documented in my data sources, a trend emerged in how teachers spoke about what they wanted from PD. Specifically, their responses consistently fell along the lines of the three conceptualizations of teacher learning introduced by Cochran-Smith & Lytle (1999): knowledge-for-practice, knowledge-in-practice, and knowledge-of-practice. I found that when EBE teachers reflected on PD and how it might improve reading instruction at their school, their responses either evoked knowledge-for-practice, with its assumption that teacher learning involves accessing a formal knowledge base, or knowledge-in-practice, with its assumption that teachers learn when they observe exemplary

teaching practice. The third conceptualization, knowledge-of-practice, was much rarer, with teachers seldom discussing the need to learn through collective inquiry.

The knowledge-for-practice conceptualization of teacher learning assumes that what teachers need to know to teach well is located within a formal knowledge base, produced by traditional scientific methods, that teachers must access through teacher education or in-service PD. This way of conceptualizing teacher learning arose consistently in interviews with EBE teachers when I asked them about PD in general, what their "dream PD" might entail, and what they most wanted to learn about. For example, in the mid-year interview, when asked what would be covered in her "dream PD," Kay said, "just best practices. Like, solid ways to do things." This response indexed her belief in the existence of a corpus of teaching practices to which she needed be introduced via PD. Similarly, Theresa described her "dream PD" as involving, "Just more… training. I just think the more we *know*, the better than we can *do*" (emphasis added). With both statements, these teachers expressed a view of PD as something that could transmit to them formal, scientific findings about reading, decontextualized from their specific classroom or students.

In her beginning of year interview, April referenced the schoolwide use of a new SOR-aligned reading assessment, Acadience, lamenting that, "we still have not been really taught about it. So that's very frustrating. I think we need to actually get a little bit more coaching on how to do that correctly." Acadience was new to the school at the time, and the teaching staff used a separate, computer adaptive assessment to satisfy state policy requirements about identifying children with significant reading deficiencies (SRDs). Returning to this sentiment at the end of year, Kay likewise regretted that teachers had not received training in the content, principles, and procedures associated with the SOR and this assessment, saying, "remember at

the beginning of the year, it was like, 'here's this new Acadience testing, read this manual, go give it.' We have not been trained adequately on any of this." Whether the topic was PD, assessment, or curriculum, these examples illustrate how teachers seemed to be aware of, and hungry for, kernels from the formal knowledge and evidence base associated with the SOR that would drive "better" reading instruction.

The second conceptualization of teacher learning that consistently emerged in teachers' reflections on PD was knowledge-in-practice, which assumes that the knowledge teachers need to teach well resides in exemplary teaching practice, which should be observed and analyzed. The codes associated with the knowledge-in-practice conceptualization were *PL: Seeing it in action* and *PL: Learning from each other*. The "seeing it in action" phrase is drawn from Theresa's beginning of year interview when she responded to a question about what kind of PD is most supportive. She described herself as a "hands-on person" who needs "the visual piece" of "watching a teacher in action, putting those strategies into play, sharing any knowledge that you know to be effective and updated." For Theresa, being given the "effective and updated" knowledge (which is reminiscent of knowledge-of-practice), as well as seeing another teacher teach (which bespeaks knowledge-in-practice), held the key for learning what it means to teach well.

Words like *show, see, watch*, and *ideas* were characteristic of this code, reflecting the base assumption of the knowledge-in-practice paradigm that "teaching… is understood primarily as a process of acting and thinking wisely in the immediacy of classroom life" (Cochran-Smith & Lytle, 1999, p. 266) and should therefore be observed, studied, and deliberated upon carefully to gain practical knowledge. For example, April replied to the "dream PD" question by saying, "I want to *see* the science and reading, taught. I want to *see* what it looks like from the beginning

to the end" (emphasis added). With this desire for seeing "the science of reading, taught," April seemed to recognize that there was something she did not yet know or understand (the science of reading) and that the way for her to know and understand it was to watch exemplary classroom practice, in real time.

April and Theresa also both made statements that indicated the potential value of "seeing it in action" in terms of the generation of "new ideas." For example, during a September classroom visit, Theresa asked, "Are you going to be in my room for literacy? Would you want to do a table group? I just still need to see some more ideas" (Field Notes 9-21-23). A month later, April posed a similar question, asking if I could come into her classroom the following week because "it would be good to get some new ideas" (Field Notes 10-05-23). In her beginning of year interview, April had also described the experience of getting to watch another educator teach reading by saying, "last year, I really enjoyed the small group lessons that you guys shared. I just thought it was very meaningful to get some new ideas." Embedded within statements of this kind appear to be, once again, the premise of knowledge-in-action: namely the idea that knowledge resides in wise action in an authentic classroom situations. This means that teachers learn by "getting new ideas" when they see, name, and deconstruct rationales for various instructional decisions (made by themselves or others).

The knowledge-in-practice paradigm also recognizes that teachers themselves can generate knowledge by and through this kind of deconstruction of classroom practice and decision-making. The code, PL: *Learning from each other* allowed me to attend to moments in which teachers evoked this particular cornerstone of the knowledge-in-practice conceptualization. For instance, in her beginning of year interview, Sophie talked about the

benefits of sharing ideas and thus creating new knowledge by jig-sawing teachers' individual strengths together:

> I think learning from each other is so beneficial, everybody has their own thing. But if we all share our ideas, we're all growing, we're all learning. We can use what works for us and then take bits and pieces [from others] and put them together. I feel like so many times as a teacher, and even I do this, and I try really hard not to, I try to be really aware, … but I feel like it's very competitive. And to share your ideas… I even have to remind myself sometimes. Nope. this is not for me; this is for the kids. This is not a competition.

She later elaborated, expressing her wish that, "if we had an opportunity during our plan time at least once a week where we could go observe someone else teaching so that we're sharing all of our ideas; we're not just forgetting what we've learned because sometimes we need that reminder or new idea." In both cases, Sophie was indexing that knowledge exists *in* practice, not just because teachers can gain practical knowledge by watching exemplary teaching practice, but also because they can work together to "share ideas," engaging in deliberate inquiry into classroom practice in ways that help them learn what it means to teach well.

Curriculum and Leadership Findings: Complexities and Paradoxes

The second set of findings relate most to the other pillars in an interconnected infrastructure for instructional improvement: curriculum and leadership. Analyzing data from interview transcripts, school meeting transcripts, the beliefs about curriculum survey, and field notes allowed me to identify details, complexities, and paradoxes within these pillars. Specifically, I found that when teachers and administrators reflected on the role of curriculum and leadership in improving their school's reading instruction, their responses echoed three main

themes: norming and cohesion, within-building accountability, and individual freedom versus schoolwide consistency.

Norming and Cohesion.

Norming and cohesion was a code I applied to text excerpts in which EBE teachers spoke about curriculum in terms of how it could or should make some things the same, across classrooms, grade levels, and the entire school. There were two areas that teachers continually emphasized as needing to be the same, or normed, across the school: (a) assessment administration and scoring, and (b) tangible, concrete guidance for what to do during a literacy block, in terms of replicable instructional routines. When explaining this need for sameness, I found that teachers used similar words and phrases, such as "cohesive," "on the same page," "unified," "disjointed," and "scattered." With these words, teachers pointed to curriculum as a tool that could serve a very specific function: create schoolwide norms that were the same across the building to strengthen teachers' individual and collective pedagogy.

In one example from their beginning of year interviews, Sophie and April were reflecting on schoolwide use of Acadience, an assessment package that was new to the school and was external to the school's literacy curriculum. As discussed in connection with the pillar of PD, April began by lamenting how under-prepared she felt to administer the assessment. Sophie echoed this concern, more explicitly identifying the need for cohesion by saying, "Yes, because we have all kinds of different grades for those [Acadience subtests] … and it's not going to be... I feel like all the material… Because it's going to be graded differently, it's not going to be cohesive across [grades]." In this exchange, April started by expressing regret that the entire EBE staff had not "been taught" about Acadience scoring, meaning the assessment "would be graded differently" and potential inconsistency in how closely teachers followed the

assessment's rules for scoring student responses. The consequence, for Sophie, was a lack of cohesion across grade, making it impossible to compare assessment results across grade levels. April and Sophie thus identified one example of what an assessment (and, by extension, a curriculum) should accomplish but was not accomplishing in their school: the creation of stable testing procedures that are replicated in the same way across classrooms and grade levels to ensure that assessment outcomes are reliable, trustworthy, and comparable.

An additional area in which teachers seemed to welcome norming and cohesion involved the plan for literacy instructional blocks, in terms of replicable instructional routines that remained the same each day in an individual teacher's classroom and were the same across classrooms in a given grade level. In the 2023-2024 school year, the principal and assistant principal introduced a fairly significant change to each grade's daily schedule by adding in what they called a "What I Need," or "WIN" block to the literacy minutes in the instructional day. Rather than dividing a single class up into small reading groups and having students rotate within their own classroom, this WIN Literacy block meant that an entire grade level would analyze assessment data together, create skills-based groupings, and then students would visit a teacher other than their classroom teacher for 70 minutes per day, based on their needs. The goal, on the part of administrators, was for the WIN block to facilitate more intentional differentiation of reading instruction and for groupings of students to be fluid and based on children's skill profiles rather than on reading levels, an instructional tool associated with balanced literacy[2] that they hoped to phase out.

[2] During the 2022-2023 school year, EBE used an assessment package called the *Fountas & Pinnell Benchmark Assessment System (BAS*). The series of formative and summative assessments in the package were designed to "accurately and reliably identify each child's instructional and independent reading levels according to the F&P Text Level Gradient™, A–Z." A key of the EBE principal's vision for implementing SOR-informed approaches in 2023-2024 was to not only change the school's assessment to a SOR-aligned test, Acadience, but also to, in her words, "get away from talking about kids in terms of levels. What even is a level C?"

While the second-grade teachers seemed to welcome the stated goals of the WIN-style of small group reading instruction at the beginning of the year, they began, over time, to point out what they saw as lack of clarity, norming, and cohesion around what should be happening during the 70-minute block. For example, during a conversation about alignment during the end of year group interview, Sophie remarked,

> But even within our grade levels, they (administrators) gave us WIN, but they didn't say specifically, what do you do during your WIN time? Well, you give them what they need. Okay, but that differs per each teacher's interpretation of what they need.

Similarly, in her mid-year interview, Theresa wished for an opportunity to gather with her colleagues to:

> focus on literacy together. What skills are you working on? What are you working on? Try to piece it together so that it's cohesive and then when you have kids rotating [out of] one group [and into another], it feels like they're moving on into the next step as they should and it feels fluid, I guess.

Theresa then elaborated on the issue of alignment across WIN groups, saying, "Yeah, because I feel like everyone's doing their own thing, and everyone's doing great things, but it'd be good to figure out how to sync up a little better." The WIN literacy block was one initiative for improving instruction that EBE administrators hoped would push teachers toward implementing SOR-aligned teaching methods. Yet, with comments like these about how the WIN block procedure unfolded in practice, Theresa and Sophie both emphasized the variability in what was actually happening in each teacher's classroom during those 70 minutes of the school day. They appeared to view the variability as a roadblock to schoolwide instructional improvement.

Kay and April reflected on that same variability, voicing their frustrations with it. In our end of year interview, Kay lamented, "But think how little training we've had [this year]. Hugely lacking. And I feel like we're so disjointed as staff because of that too. We've not sat in a room and had a training together all year this year." In a similar exchange, Sophie described some routines and adjustments she made for her WIN block. Hearing these details about how her colleague structured this instructional time, April interjected, saying, "It's scattered! We don't even know what each other's doing." All four teachers described feeling "disjointed" and "scattered" when it came to this instructional block for which there was no curriculum and no scope and sequence, only a desire for differentiation and a vaguely expressed vision for teaching according to the SOR.

This may reflect an unintended consequence of the new WIN block structure for small group instruction. The administrators added this block to the schedule and left it up to teachers to decide what and how to teach, without providing a curriculum or norms on instructional routines should occur across all classrooms. Although this decision communicated trust in teachers and their ability to plan and structure their own small group reading instruction, it also created a sense of lack of cohesion and a desire among teachers to create it somehow.

Within-building accountability and the freedom-consistency paradox.

Related to leadership decisions like the provision of the WIN block, I also found two themes connected to leadership, as a pillar of reading instructional improvement: a desire for a kind of within-building accountability and the freedom-consistency paradox. To appreciate these two themes, it is important to first recognize that professional trust was a key organizational value in the culture of this school. One way school leaders expressed that professional trust was affording teachers a great deal of freedom; for example, to select their own supplementary

instructional materials, adjust pacing guides, depart from the daily schedule at times, and more. At the same time, though, administrators experienced pressure to ensure that some practices were the same across the school, demonstrated by the desire for within-building accountability and a paradox between providing freedom and creating consistency.

When I refer to the theme of within-building accountability, I mean moments from interviews, meetings, and informal conversations in which teachers expressed the need for someone, presumably school leaders, to ensure that teachers at EBE were doing the things that they were "supposed" to do to make reading instruction better. Kay spoke to this theme somewhat directly. When I asked her to reflect on the instructional leadership at EBE, she brought up a former colleague who had moved to a nearby district and was struggling with a very involved instructional coach who sometimes shamed teachers for departing from the curriculum. "I don't want [that] life," Kay remarked. "I don't want to be told what I have to teach every day and follow the script." At the same time, though, she thought about the consistent presence of someone overseeing instruction and said, "I feel like there could be… somebody a little more involved with that." When I asked what she meant by more involved, Kay said, "I'm talking about, just more accountability. Like how are you teaching from this [curriculum or other resource]? How are you doing this? What does this look like? We never get asked that. And I'm not afraid to share." With this statement, Kay described one part for leadership to play in improving reading instruction at EBE: holding teachers accountable to explain their rationale for various instructional decisions.

In a similar exchange, Kay brought up another tension within leadership, explaining, "I feel like part of what our problem is here, is… I love that Kristy (the principal) really doesn't micromanage, she doesn't tell us how to do things... and it's a fine line to tow. But then, and I

got a real strong sense of this in leadership (team)[3] last week, there are just certain teachers who have a really solid, strong mindset. And it's kinda… there's room for flexibility. You know what I mean? Like, there's some people who are so rigid and stuck in this, it's like ugh!" In this reflection, Kay celebrated the fact that the principal, Kristy, did not "micromanage" EBE teachers, while also pointing to a potential cost of not micromanaging, namely that the teachers with "rigid" approaches and methods who were "stuck" in their "strong mindsets" would stay that way, with no one to spur them into changing or updating their practice.

Another way of labeling this desire for within-building accountability is to think of it in terms of what I have called a freedom-consistency paradox, a code I applied to text excerpts that evoked the tensions between allowing teachers freedom to do what they think is best and ensuring some practices are consistent whole-school. Speaking directly to this tension, the assistant principal, Carter, reflected on a message he hoped to send to teachers that, "we're going to put some structures in place. It's going to feel uncomfortable; we're not taking everything away. But if we're going to be aligned, these are things that we're going to have to do." With this statement, Carter described the need to "put some structures in place" to ensure sameness, or cohesion, across classrooms and grade levels while also protecting the freedom and trust extended to teachers by administrators by "not taking everything away." The principal, Kristy, provided an additional example, elaborating,

> If it's going to benefit students, then yeah, we're going to put systems and structures and alignment in place. Like for example, we use decodable readers, we don't use leveled readers. Because whichever room [students] are in, we all have to agree to that because we want the experience to be equitable.

[3] Leadership team meetings consisted of the principal, assistant principal, and grade level leads. Kay is the second-grade lead.

This excerpt from my conversation with Kristy encapsulates the freedom-consistency paradox. As a leader in the school, it was important to Kristy to preserve the school's core value of granting teachers the freedom to change and adjust instruction as they see fit, regardless of what others were doing. However, as she explains with the example of decodable readers, Kristy does not see that prerogative of freedom as applying universally, no matter what. Ensuring the ubiquity of certain instructional practices, such as the use of decodable text instead of leveled readers in all literacy classrooms schoolwide, is more important "because we want the experience to be equitable."

Discussion and Implications

The first set of findings related to PD demonstrated how EBE teachers viewed PD in terms of acquiring formal knowledge (knowledge for practice) and/or watching experts teach (knowledge-in-practice). I contend that teachers' gravitation toward these ways of understanding professional learning is deeply connected to the SOR policy landscape. Specifically, I argue that EBE teachers' perspectives on PD are indicative of and intertwined with two larger tendencies of the SOR, as a reform movement: (a) a reverence for formal, scientific knowledge, that can reproduce binaries and claims of scientific certainty and (b) an overall restriction of what it means to be a teacher of reading.

PD: The Formal Knowledge Base, Binaries, and Claims of Certainty

As a movement, the SOR has emphasized the existence of a formal knowledge base about reading, composed of studies that use traditional scientific methods and can tend to be viewed as more "rigorous" than other methodologies (Vaughn et al., 2020; Yaden et al., 2021). My inquiry at EBE can elucidate what it looks like and sounds like when teachers and administrators have internalized this kind of reverence for formal, scientific knowledge and what

such an internalization might mean for the integration of the SOR with asset-based pedagogies. Further, I argue that we, as a field and as stakeholders in U.S. reading education, must be aware of what can happen when reform and policy movements like the SOR valorize a formal knowledge base and de-emphasize other types of knowledge (constructivist, sociocultural views of knowledge, for example). Those consequences, especially in the case of this small rural school in Colorado, include the creation and maintenance of monolithic, binary categories such as effective/ineffective or scientific/unscientific.

When teachers like those at EBE conceive of professional learning or PD in terms of knowledge-for-practice, assuming that knowledge from a formal knowledge base must be transmitted to them, they are being implicated in a phenomenon associated with the SOR and the movement it has inspired (Yaden et al., 2021). In that phenomenon, contributors to the SOR, as well as the policymakers drawing upon it, tend to remain rooted in a positivistic paradigm, one that seeks to uncover standardized, generalizable patterns about how children learn to read, using traditional scientific methods designed to ensure internal validity and facilitate causal inference (Jensen, 2021). Knowledge produced this way, via these methods and according to a positivistic tradition, is the knowledge that EBE teachers craved in their PD experiences. In my view, the issue that deserves attention is not so much that the teachers were eager for such knowledge; it makes sense that they would be, given policy mandates in Colorado and across the country that require them to acquaint themselves with the SOR evidence base and incorporate it into their teaching practice. Rather, what I want to explore is what happens when such knowledge is valorized, at what expense, and with what stakes.

As some researchers have already described, the valorization of formal knowledge, like what has occurred in the SOR movement, produces, reproduces, and maintains binary categories

about scientific versus unscientific teaching practices, effective versus ineffective curriculum, and knowledgeable versus unknowledgeable teachers and teacher educators. Not only do these binaries shape how the media and the public come to frame or understand reading achievement (Author, 2024), they also run counter to what science, as a discipline, is all about: being wary of certainty or absolute knowledge and reluctant to accept anything as unequivocally settled science (Yaden et al., 2021). Researchers like Yaden et al. (2021) have been exploring the SOR's epistemological affiliations and resulting penchant for projecting certainty about how children should be taught to read.

My inquiry at EBE joins this conversation, painting a picture of how this penchant for certainty comes to life in an actual school building, shaping teachers' understanding of what they need to know and how they need to teach. Thus, I argue that EBE teachers' discussion of PD and professional learning must be considered in light of this contemporary, SOR-focused moment in reading education. Teachers' discussion of PD consistently indexed the need to access formalized, scientifically produced knowledge, despite the emphasis of the larger PD partnership that framed them as key holders of expertise. This is significant because it is inextricably linked to the SOR's epistemological tendencies toward binaries and implicit assumptions about the ability to establish some kind of final truth about reading instruction. To move toward a centering of equitable and asset-based instruction in reading science, we must first understand the nuanced ways in which SOR rhetoric shows up in schools like EBE and how it contributes to teachers' sense of what it means to teach reading.

Restricting what it means to teach reading

Examining how PD functioned in EBE's path toward improving reading instruction made it possible to discern how another rhetorical proclivity of the SOR manifests in a local context:

the tendency to restrict what it means to teach reading. For example, when EBE teachers answered an interview question about what their dream PD would entail, many of them described being given an entry point to the formal, scientific knowledge about the "best" ways to teach reading, not learning about, for example, the multiple literacies and language practices employed by their students. What is significant about this response is both what it includes and what it leaves out. What it included, in many cases, was teachers explicitly indexing the need to learn "the science" of the SOR: the practices that have been granted the moniker "evidence-based" from this formal body of research on reading and writing development. Their responses about dream PD notably omitted other literacy topics that a reading teacher might need or want to learn about, such as biliteracy, social emotional learning and literacy, culturally responsive literacy teaching, and more, despite some teachers expressing interest in these topics in more informal interactions over time.

Reading researchers have critically examined how the SOR narrows the reading children do at school to only the kind of reading that is assessed for proficiency (Aukerman & Chambers Schuldt, 2021). Driven by the trends and patterns that emerged through this inquiry at EBE, I suggest that the SOR might be catalyzing a similar kind of narrowing in teacher learning, positioning the reading teacher as vessel of and vehicle for evidence-based practices. Scholars in the field of literacy and reading education have flagged this same narrowing tendency and offered strategies for interrogating and resisting it. Hoffman et al. (2021), for instance, urged that literacy researchers and practitioners should expand our collective lens on the SOR to account for its impact and consequences. One such consequence, the authors advised, is the risk of "taking from teachers their ethical and moral responsibility to be knowledgeable and adaptive in their teaching of literacy" (Hoffman et al., 2021, p. 95). Regarding that responsibility,

Vaughn et al. (2020) called for the movement toward SOR pedagogy to weave in principles of adaptive teaching in order to: (a) resist "homogenizing classroom practices" designed to impart a discrete set of skills to students, (b) frame reading as a sociocultural rather than a technical act, and (c) make it possible for teachers to be seen and treated as decision-makers who "capitalize on students' strengths and resources as a means to teach reading" (p. 302).

These examples highlight a scholarly conversation that critically examines the SOR. As such, they provide valuable lenses through which to consider what happened at EBE when I invited teachers to reflect on PD and its potential to improve reading instruction in their building. In some ways, the teachers' repeated evoking of a formal knowledge base reflects the kind of narrowing and restriction that concerned researchers like Hoffman et al. (2021) and Vaughn et al. (2020). In other ways, especially once the pillars of curriculum and leadership were folded into the analysis, the EBE teachers' responses begin to shed light on how implementing the SOR does not always necessarily involve undermining teachers or casting them according to a deficit lens.

Curriculum and Leadership: Surveillance or support?

In interviews, meetings, and across other data sources, when teachers talked about PD, they spoke about wanting to learn the knowledge and practices that comprise the SOR evidence base. When they talked about curriculum, they spoke about wanting norming and cohesion, sameness across the building in terms of assessment, instructional goals, and the basic schedule of a literacy block. When they talked about leadership, they spoke about wanting more within-building accountability from school leaders who might ask how and why teachers were doing certain things in literacy classrooms.

At first glance, these trends—gravitating toward formal knowledge, norming and cohesion, and accountability—resonate with the concerns raised by Hoffman et al. (2021),

Vaughan et al. (2020), and Wetzel et al. (2020) about the SOR's penchant to restrict what it means to teach reading and promote deficit narratives about teachers. The trends may also seem reminiscent of other top-down policy mandates that narrow curriculum to test-taking strategies (Zoch, 2015), impose pedagogical constraints related to high-stakes testing (Hikida & Taylor, 2023), or contradict educators' commitments, identity, and philosophy (Stillman & Anderson, 2015). However, I suggest that EBE teachers' reflections on PD, curriculum, and leadership reveal a distinctive local interpretation of Colorado's SOR legislation, one in which teachers themselves see the content of the READ Act not as something to be resisted or reappropriated but embraced. Examining PD, curriculum, and leadership as pillars in an interconnected infrastructure for reading improvement revealed that when EBE teachers considered improving reading instruction in their building, (a) they had more agency regarding their practice than critics of the SOR might imagine and (b) they accepted the need to learn from the SOR evidence base without internalizing blame for students' supposed reading failure. Together, these perspectives compel me to characterize what happened at EBE as indicative of a desire from teachers to be supported in the SOR rather than their protestation at being surveilled by SOR policy.

Regarding practice: teacher agency and the SOR

My purpose in grounding this inquiry in Cochran-Smith & Lytle's (1999) three conceptions of teacher learning was to elevate explicit and implicit assumptions about the relationship between what teachers know (knowledge) and what teachers do (practice); these assumptions are particularly salient for considering teachers' agency in EBE's path toward improving reading instruction in their building. Regarding practice, or what teachers do with children when teaching them reading, the most notable thing about the EBE teachers in my study

is that they expressed a genuine desire to understand and apply the instructional methods endorsed by the SOR evidence base and saw curriculum as a key lever for doing so. This was not a case where teachers were being duped, manipulated, or pressured into employing teaching practices with which they disagreed or believed were detrimental to children. In her beginning of year interview, Theresa demonstrated her own investment in the SOR and its associated emphases by connecting what she learned during the state mandated READ Act training to her own children, explaining:

> in the past, prior to any experience working with kids at all, just with what my kids would come home [and do for homework], it felt like they were just doing a lot of memorizing. So, I really see the value in the Science of Reading and really, you know, getting those… the phonological awareness [skills] down, you know, that's huge. And even with my own kids, I can see where my youngest needs help in that area, and so there's a lot of value there, and I'm excited to… put it all into practice because I do think it's extremely valuable.

As a teacher and a parent, Theresa viewed the SOR's instructional foci, such as building phonological awareness skills, as essential and good for children, including her own child. She thus issued a resounding endorsement of what the SOR calls teachers to do with children in classrooms, expressing enthusiasm to "put it all into practice." I see this as an important perspective to fold into critical conversations about the SOR. Those conversations often point to the urgent and concerning risk that the SOR might encourage framing teachers, their knowledge, and their practice through a deficit lens (MacPhee et al., 2021; Wetzel et al., 2020). However, at EBE, teachers' relationship with the SOR, including their sense of its role in improving reading instruction in their building, did not entirely match the uneasy circumspection of SOR critics or

critical policy analysts who warn that policies like the READ Act can disenfranchise teachers and undermine their agency in their own practice. Instead, the teachers at EBE seemed to regard the instructional methods required by state policy with a general curiosity and enthusiasm. They expressed interest in applying those methods school-wide, with the help of a curriculum that might norm the entire staff on things like assessment, instructional goals, and a shared schedule, as well as school leaders who would hold teachers accountable on norms.

Regarding knowledge: craving "the science" without accepting blame

In addition to this enthusiasm for SOR-aligned instructional practices, I suggest that EBE teachers' perspectives on knowledge is significant because the teachers showed an eagerness for learning key insights from the SOR evidence base. Notably, this eagerness did not include any deficit framing of teachers through the suggestion that they should already know or appreciate the content from the SOR. To be clear, I stand by my interpretation from the first half of this discussion about how EBE teachers' reflections on PD are intertwined with the rhetorical tendencies of the SOR movement to valorize knowledge produced through scientific methods, uphold binaries and claims of certainty, and restrict what it means to teach reading. What I am contending here is that there is something else that characterizes how teachers themselves conceptualize the knowledge they need to possess or acquire to teach reading well. Even though teachers repeatedly evoked the existence of a formal knowledge base in keeping with a knowledge-for-practice paradigm, they did not seem to have internalized the narrative that researchers like Mosley Wetzel et al. (2020) have examined, one that maligns teachers and teacher educators for not knowing enough about the SOR.

Like their position on teaching practices and the SOR, EBE teachers' reflections on PD, curriculum, and leadership consistently illustrated a desire to learn the principles and practices

that comprise the SOR that have been produced through decades of interdisciplinary research on the science of learning to read. This desire may be expected given the momentum of the SOR as a reform movement, including its prominence in media (e.g., Hanford, 2022). Significantly, though, when EBE teachers described their interest in learning more about the SOR, they recognized and spoke openly about what they saw as a gap in their professional knowledge and referenced things they did not know, without positioning themselves as struggling or failing.

When April said, "I want to learn how to do the science of reading compared to guided reading" or when another teacher asked for a handy list of what she simply called "the spelling rules," neither teacher indicated that there was something deficient about them, their practice, or their knowledge, nor were they implicating themselves in any version of the Reading Wars by coming down on the side of balanced literacy or structured literacy. Instead, they were acknowledging that there were things about teaching children to read that they did not know or understand (i.e., how to shift away from a guided reading approach and how certain rules and patterns govern English spelling) and expressing a desire to learn those things. I found that the teachers spoke of principles from the SOR evidence base with a kind of clear-eyed eagerness, one that centered not on the idea that teachers were somehow "failing" children because of what they did not yet know, but an acceptance that there was knowledge they still needed to acquire in order to grow their practice.

As someone deeply interested in the SOR, how it can be translated into classroom settings, and how it shapes public perceptions of the teaching of reading, I am heartened by this phenomenon at EBE. Like Hoffman et al. (2021), MacPhee et al., 2021), Vaughn et al. (2020), and Mosley Wetzel et al. (2020), I have endeavored to retain a critical lens on the kinds of impacts the SOR movement has engendered, including the circulation of a narrative that teachers

do not know enough or teach well enough. When I first visited EBE during the first year of the PD partnership, I expected to find some version of this narrative alive and well at the school, perhaps manifesting as teachers' loyalty to balanced literacy or a vehement objection to any implication that teachers had somehow been teaching reading "wrong" before the passage of the READ Act. Instead, my years-long inquiry at EBE has shown me that there is more to the story. Rather than feeling constrained or maligned by the SOR and its accompanying rhetoric, teachers viewed the evidence base as something they wanted to learn so that it could animate their teaching practice, galvanized by PD, curriculum, and leadership. By examining how PD, curriculum, and leadership functioned in one school's path toward improving reading education in their building, I was able to discern complexities within teachers' relationship to the SOR and SOR policy, including nuances around teacher agency regarding their knowledge and practice.

Concluding Thoughts

Acknowledging that no school or community context is the same, this study endeavored to answer the call by Woulfin and Gabriel (2020) to foreground the systems-level factors of PD, curriculum, and leadership when studying reading instructional improvement. As described by those authors and others who have examined the SOR policy landscape (Hoffman et al., 2020; MacPhee et al., 2021; Yaden et al., 2021), adopting such a lens in scholarly work opens possibilities for adding nuance to the rhetoric often associated with SOR reform in states across the U.S., including Colorado. Such rhetoric can imply, for instance, that there are inherent problems with how teachers and schools teach children to read and that practitioners must be held accountable to learn and apply evidence-based methods for reading instruction (Author, 2024). By examining how the infrastructural pillars of PD, curriculum, and leadership functioned in EBE's path toward instructional improvement, this study adds complexity to such

logic and offers a more asset-based, agentic view of elementary teachers of reading. Rather than being restricted or surveilled by SOR policy mandates and messages, the group of elementary teachers at EBE were drawn to the SOR, as a body of research and reform movement. They were eager for PD that would help them access the formal knowledge base at the heart of the SOR and enthusiastic about SOR-aligned curriculum and accountability-focused leadership.

This work found that teachers and administrators pursued instructional improvement in their building in ways that did not always reproduce the deficit framings of teachers that can often accompany SOR-inspired policy like the Colorado READ Act. However, the degree to which a single study can speak about how the rhetorical tendencies of the SOR unfold on the ground with local practitioners is limited. As such, a natural extension of this work is the continued investigation of PD, curriculum, and leadership in other organizational systems of various sizes: individual schools like EBE, as well as larger school communities that include tutoring or after-school services and whole school districts.

Teachers and administrators at EBE and in schools across Colorado continue to teach children to read, surrounded by media messages about their work and the pressure to comply top-down policy mandates regarding curriculum selection and teacher training. This work suggests that being situated in such a policy landscape, one that has been shown to be rife with deficit narratives about teachers (Hoffman et al., 2020; MacPhee et al., 2021; Wetzel et al., 2020), does not necessarily mean that teachers themselves feel maligned by SOR accountability measures. Rather, a systems-level view that includes PD, curriculum, and leadership can elucidate possibilities for researchers and practitioners alike to integrate the SOR, as a body of research and inspiration for reading education policy, into efforts to improve reading instruction in schools while honoring teachers' agency, knowledge, and desire to grow their practice.

Chapter Six: Place Conscious Paradigms and Research Practice Partnerships: A Key Conceptual-Methodological Combination in the SOR Era

K-5 reading education has been at the center of recent education reform policies. A central goal in the current reading policy agenda is aligning elementary reading instruction to the evidence base on how children learn to read. 40 states and the District of Columbia have passed laws or other policy measures that aim to bring evidence-based methods for teaching reading to elementary classrooms (Schwartz, 2024). The laws, inspired by a body of research known as the Science of Reading (SOR), impose requirements in a range of areas, including teacher training, curriculum selection, and processes for providing extra support for students with reading difficulties (CDE, 2019; Schwartz, 2024). Underpinning such legislation, with its purported aims to improve the quality of elementary reading education in the United States, is an important premise: that top-down policy mandates are capable of producing significant pedagogical change in elementary classrooms, without much attention to local or contextual nuances.

As a number of reading researchers have argued (Jensen, 2021; Yaden et al., 2021), SOR research, as well as the reform it has galvanized, tends to favor positivist questions about how to teach all children to read based on scientific evidence, rather than interpretivist investigations about particular students' meaning-making processes in particular contexts (Jensen, 2021). There is thus an implicit tension in the SOR movement between the assumption, on the one hand, that reading education can seamlessly be improved by standardized adoption of evidence-based methods and the principle, on the other, that it matters who, how, and where reading is taking place when seeking to change instructional practice. In this conceptual essay, I aim to elaborate on this tension by connecting critical reflections on the fraught policy context around elementary reading education with theoretical insights about the salience of place and methodological

insights about the value of collaboration across boundaries in moving from policy to practice in schools.

The central argument of this essay emerged from putting ideas about place-based education into conversation with the landscape of contemporary elementary reading policy, all against the backdrop of a multi-year professional development (PD) partnership between university-based literacy researchers and in-service teachers and administrators at a rural elementary school in eastern Colorado. The school, East Bridge Elementary (EBE, a pseudonym), is located about 60 miles from my university campus in a town of approximately 3,013 (U.S. Census Bureau, 2019) (see Table 4 for additional contextual information about the school and project in which this essay is situated). Although my aims in this essay are conceptual, not empirical, I interweave data excerpts from my three-year immersion in the EBE school community to illustrate my arguments on the value of place-based collaborations in the SOR era, particularly in rural schools like EBE.

Table 4. School Partnership Context, East Bridge Elementary (EBE) School

Layer of Context	**Details**
Students	Student population: 544 15.1% identified as English Language Learners (CDE, 2025)
Teachers	Kay (2nd Grade Level Lead, 20+ years of experience) April (2nd Grade Teacher, 11 years of experience) Sophie (2nd Grade Teacher, 4 years of experience) Theresa (2nd Grade Teacher, 1st year of teaching)
Partnership activities	Whole-school PD, participation in planning meetings, instructional goal setting, co-teaching, modeled lessons
Data sources	Interview transcripts, PD artifacts, transcribed meetings and school events, an anonymous survey about teachers' use of curriculum, field notes

Specifically, I contend that SOR reforms in reading education make it necessary to support teachers in finding creative and strategic ways to coordinate what the field knows about how all children learn to read with what teachers themselves know about individual children's strengths, needs, and lived experiences based on their own position and connections to communities. Such coordination represents *what* is particularly necessary given the current conditions surrounding reading education. I further suggest that *how* we, as researchers, might support and study the enactment of these policy mandates resides in methodologies that center mutualistic collaborations across institutional, geographical, or other boundaries.

In what follows, I first describe the contours of the current policy climate around elementary reading education in order to contextualize the conceptual and methodological approaches to research and support for practice for which I am calling. Then, I make the case that place conscious paradigms, especially in rural schools, provide particularly vital conceptual approaches to research in the SOR policy era, illuminating possibilities for integrating issues of equity into the SOR movement. Next, I discuss methodological approaches, like research-practice partnerships (RPPs), that foreground collaboration and the multi-directional flow of knowledge in ways that facilitate attention to place in policy enactment that are valuable in this particular moment in elementary reading education. I conclude by submitting that these two areas—place conscious paradigms and RPPS—represent a key conceptual-methodological combination in a SOR era.

Background on Reading Education Policy

K-5 Reading Policy and the Science of Reading: A Brief Overview

In order to understand the need for and value of place conscious models and collaborative research designs the SOR era, it is necessary to appreciate the complexities of contemporary

elementary reading policy. To overview those complexities, I first summarize SOR-inspired policy measures across the U.S.; then, drawing on the work of reading researchers who have brought a critical lens to the SOR, I describe some of the narratives about teachers, reading, and literacy that have been circulated by and through this reform movement.

Embedded within the contemporary reading education policy landscape is a deeply felt need to reform the quality of reading instruction in U.S. public schools. On a larger scale, the publication of the *A Nation At Risk* (1983) report galvanized a shift in U.S. education policy in which the federal government has assumed an unprecedented level of control over the education system (Mehta, 2013). Figuring prominently into this new "education policy paradigm" is reading education, especially the process of teaching young children to read. That process has been imbued with even more significance and urgency amid reports about "reading scores falling to a new low" (Schwartz, 2025) and news articles evoking an unfolding battle over the best methods for teaching reading (Goldstein, 2022; MacPhee et al., 2021). Public discussions of elementary reading education echo the alarmist message of American Public Media (APM) Reports' "Sold a Story" podcast, which, in its description, decries the "many schools [that] don't know the research" and "buy teacher training and books that are rooted in a disproven idea" (Hanford, 2022). Thus, in formal media outlets and public discussions on social media, the teaching of reading has come to be associated with a sense of crisis, a kind of moral panic (MacPhee et al., 2021), over the supposedly ineffective, research-averse methods of reading that purportedly abound in elementary classrooms.

For policymakers in a growing number of states, the answer to quelling such panic has involved legislation inspired by the SOR aimed at reforming reading instruction in schools. These are state laws that impose requirements about the training teachers receive and the reading

curricula schools use, all with the goal of aligning classroom practice to the evidence base from the SOR. In Colorado, for example, the Reading to Ensure Academic Development (READ) Act requires that all K-3 public school teachers complete 45 hours of training on evidence-based methods for teaching reading and that all public schools select their literacy curriculum from an advisory list of state-approved vendors (CDE, 2019). According to official policy documents associated with the READ Act, the purpose of imposing these mandates on teacher training and curriculum selection is to "ensure that students educated in the public schools… consistently receive evidence-based instruction that is proven to effectively teach children how to read" (CDE, 2019). Colorado was an early adopter of SOR-inspired legislation and is the site of the literacy-focused PD partnership at the heart of this essay. As such, it is crucial to appreciate the larger policy goal of Colorado's SOR law—to bring evidence-based instruction to all elementary classrooms—and the tenor of the discourse that ensconces this goal, which has imbued reading reform with a sense of urgency in a statewide fight against unscientific ideas.

A final piece of the puzzle in overviewing K-5 reading policy and the SOR involves defining the SOR, including what it is and is not. The Reading League (2021) offered a widely used definition of the SOR as "a vast, interdisciplinary body of scientifically based research about reading and issues related to reading and writing." Contributors to the SOR include cognitive scientists, psychologists, and other researchers who develop theory-based models of reading and empirically test hypotheses about reading through randomized control trials and quasi experimental designs (Castles et al., 2018). As such, SOR studies often identify which cognitive skills are relevant to reading without necessarily explaining how or when to teach them (Jensen, 2021; Seidenberg et al., 2020). The SOR is thus a body of research and not a curriculum or educational product, although many literacy curricular packages and services

market themselves as SOR-aligned or SOR-based given contemporary media coverage and SOR laws. The literacy curriculum used by EBE, for example, is Houghton Mifflin Harcourt's *Into Reading*, a CDE-approved program that, according to its website, provides "science-backed instruction…based on research in the essential elements of literacy" (HMH Education Company, 2025).

As demonstrated by this overview of the elementary reading policy landscape in Colorado, research from the SOR has been instrumentalized to reform the way teachers are trained and the way reading is taught in U.S. public schools. The purpose of such reform, according to laws like the Colorado READ Act, is to achieve congruence between reading education and science about how the brain learns to read. To make education congruent with the scientific evidence base is undoubtedly a venerable and worthwhile goal. It matters deeply to me and to the myriad of teachers, administrators, families, and teacher educators who are invested in preparing knowledgeable, responsive, and skilled teachers and providing equitable, high-quality reading instruction for young people. Importantly, though, the public pursuit of this goal and its depiction in policy, in schools and districts, and in the media has promulgated distinct narratives about reading, teaching, and teachers. Such narratives, which I turn to next, are highly consequential both for understanding how the SOR movement manifests in a local context like EBE and why place conscious paradigms and mutualistic collaborations like RPPs are especially important in the era of the SOR.

Resulting narratives about reading, teaching, and teachers

As policymakers, practitioners, and the public pursue the goal of creating stronger continuity between the evidence base from the SOR and how teachers teach reading, distinct narratives emerge about what it means to read and what it means to teach reading. Elaborating,

(Aukerman & Chambers Schuldt, 2021) suggest that SOR research and policy can show a preoccupation with the question of "what works in service of assessed reading proficiency" (p. 87). Jensen (2021) similarly points out that by adopting positivism as their dominant paradigm, SOR studies are mostly concerned with uncovering generalizable patterns and making causal inferences about the effects of instructional practices, not necessarily with interpretivist issues of how readers make meaning with one another in particular contexts. Relatedly, Yaden et al. (2021) suggest that SOR research and policy may be reproducing the nature-nurture binary, aligning itself mostly with the nature side by being mainly concerned with cognitive and neurobiological topics like brain imaging and eye movement and deeming as distractions the considerations more associated with the nurture side, such as social environment. Such emphases in research design and focus make sense given that the SOR is a corpus of interdisciplinary studies that mostly use traditional scientific methods to explore questions about reading, writing and literacy.

Yet, as the work of Aukerman & Chambers Schuldt (2021), Jensen (2021), Yaden et al., (2021), and Noguerón-Liu (2020) demonstrates, there are real and important consequences of the SOR's epistemological affiliations. One such consequence, enumerated by Aukerman & Chambers Schuldt (2021), is an implicit acceptance of the idea that the only kind of reading that matters is the kind measured on standardized tests of reading proficiency. Defining reading in this way runs the risk of neglecting the myriad of factors that matter deeply in children's literacy, such as the "textual dexterity" students must possess to "access, understand, use, and scrutinize text for purposes that matter to them" (Aukerman and Chambers Schuldt, p. 87) and the dynamic literacy practices of emergent bilingual students (Noguerón-Liu, 2020). SOR policy initiatives that myopically focus on the type of reading contained in assessments can thus promote a narrow

view of what it means to read, elevating testable skills, strategies, and knowledge, while demoting others to the margins. Anyone involved in elementary education or teacher education should take seriously the SOR's penchant to narrow reading as a construct to the skills that predict success on reading assessments, therefore implying that all other aspects of reading are pesky distractors from "what works" in raising test scores. Furthermore, as I argue in this essay, an equitable, responsive implementation of the SOR requires an awareness of the tendency in SOR research and policy toward positivism, generalizability, and achievement-based outcomes. Such awareness has turned me, and others, I hope, toward conceptual frameworks like place conscious paradigms and methodologies like RPPs, which can open possibilities for coordinating what the field knows about how children's brains learn to read with what teachers know about individual children in their own school and community contexts.

This conceptual-methodological combination is vital not only because of how the SOR movement runs the risk of narrowing what it means for students to read, but also because the movement risks elevating deficit narratives about teachers who teach reading. One such narrative, circulated in the media through reports like Emily Hanford's (2018) about how "many educators don't know the science," suggests a linear, roughly causal relationship between how thoroughly teachers are trained, how much they know about the SOR, and the state of literacy in U.S. public schools. In this rhetorical chain of reasoning, gaps in teacher educators' knowledge about the SOR purportedly create weaknesses in practicing teachers' quality of instruction, which then produce poor scores on reading assessments (Wetzel et al., 2020). In policy making, the answer to this supposed problem with teachers' knowledge has involved mandates that seek to align instruction to the SOR, a strategy that can "silence" teachers on how reading science may be meaningfully integrated into their instruction (Hoffman et al., 2020). In addition, and

significantly, such policymaking approaches can deemphasize research agendas or school initiatives related to equity or culturally and linguistically sustaining pedagogies (Hoffman et al., 2021). They can also promote a view of teachers as technicians who simply transmit decontextualized skills to their students, rather framing them as knowledgeable decision-makers who "capitalize on students' strengths and resources as a means to teach reading" (Vaughn et al., 2022, p. 302).

The proclivity of the SOR movement to implicate teachers in all issues with reading in the U.S, to sideline all elements of literacy other than evidence-based instruction, and to reduce teachers to transmitters of knowledge is weighty and far-reaching. It is the water that teachers and administrators swim in, including my partners at EBE. This context surrounding SOR policy grounds my argument about the value of place consciousness and mutualistic collaborations in the SOR era both as means for resisting deficit narratives about teachers, and also as a way of contributing to a vision of equity in the SOR.

In his article about "advancing the Science of Reading equitably," Jensen (2021) reflects on how the field of reading research might facilitate a convergence between what we know about how to teach reading equitably, according to asset-based pedagogy, and what we know about how to teach reading effectively, according to scientific evidence. To do so, he explains, we must see reading instruction as capable of being "effective in assisting student reading performance and meaningful in terms of integrating values, practices, and identities of minoritized students' everyday lives (p. 69)". I echo Jensen (2021) in this both/and perspective on what it means to teach reading equitably. Like Jensen (2021), I insist that reading instruction can be grounded in more than one thing; it can be informed by evidence, which is a deeply necessary and valuable criterion, *and* it can be committed to honoring the identities, literacies,

and experiences children bring to their schooling experience. In the rest of this essay, I explain how principles from place conscious paradigms and collaborative methodologies might support this agenda to braid together multiple priorities in equitable reading instruction.

Rural Schools and Methodologies Centering Place and Collaboration

The idea that multiple priorities might be braided together amid a mandate-heavy policy context is, of course, neither novel nor revolutionary, and my intention is not to suggest that it is. Rather, my position is that (a) the present climate around elementary reading makes it more important now than ever before to support teachers in triangulating what can be learned from the evidence base on learning to read with what they know about their own local context, and (b) collaborative, place-based research, especially in rural schools, represents a valuable opportunity to cultivate, understand, and analyze that type of triangulation. The first part of the essay explored the former prong of this argument. This part will take up the latter by reviewing place conscious paradigms that are premised on the idea that it is possible to both accept and adapt evidence-based practices for use in unique social and cultural contexts like rural schools by, for example, recognizing local literacies as assets to be leveraged in research and instruction. Then, I explore methodologies that might be well suited for achieving such aims, including RPPs, which reject the idea that knowledge must simply be translated from researchers to practitioners.

Conceptual Approaches to Research in Rural School Contexts: Place Conscious Paradigms

In this section, I describe place conscious paradigms as valuable conceptual approaches to education research within rural contexts by first explaining the historical trends in rural education research from which place-conscious paradigms arise, as well as some of the distinct complexities facing rural schools like EBE. I then define place conscious paradigms in terms of some of their key conceptual positions, including a view of context as non-static, recognition of

rurality as a cultural construct, and the ongoing endeavor to value context-specific insights about students and leverage local literacies in the classroom. To deepen this description of place consciousness as a conceptual approach to school-based research in rural contexts, I interweave anecdotes from three years of partnership work with EBE teachers, especially the second-grade teaching team. With excerpts from field notes, interviews, meetings, moments of co-teaching, and other qualitative data sources, I aim to illustrate how members of a university-based research team strived to ground our research and on-the-ground collaborations with teachers in a place-conscious approach and how there were, at times, challenges involved in fulfilling the conceptual vision of place consciousness.

Place-based or place-conscious approaches to researching rural schools arise, according to Biddle and Azano (2016) from the tendency in rural education research to reproduce the "the rural school problem," a term first coined by reformers in 1912. They explain a historical trend in which researchers viewed rurality as anti-modern, thus motivating a research agenda focused on ways to achieve parity between rural schools and urban schools. Vestiges of this perspective persist today as researchers who study rural schools risk casting the challenges rural schools face as unsolvable problems compositional to rurality itself (Biddle and Azano, 2016). Among these challenges are staff turn-over, strained financial resources, and access to instructional support (Hesbol et al., 2020) as well as inequitable access to healthcare and employment for some families (Vernon-Feagans et al., 2018). Additionally, despite efforts to attract teachers from metro areas to rural locales (as described in Cowen et al., (2012), for example), research indicates that "teaching is largely a 'home-grown' workforce" in rural schools, meaning that efforts to change or improve the quality of teaching in rural schools must invest in the teachers who are already there (Barrett et al., 2015).

The assistant principal at EBE, Carter, described this phenomenon of a home-grown workforce when answering a question about whether teacher recruitment was a problem in EBE's district. Referencing Cedarville (a pseudonym), a high-performing urban district about forty miles away from EBE and Augusta, another urban district, he explained,

> What happens is Cedarville kind of goes first. Everybody wants to be in Cedarville. So, they fill up and then it goes to Augusta and those other schools and then we would get the leftovers. Usually new teachers. And then we get people out here. But what's happening is even Cedarville and these schools, like they're not filling up or barely filling up. There are no leftovers. So no one's coming out here to apply. So, now we're stuck with the people that have been here or a parent that wants to try it out or a mom who's a long-term sub who wants to try it out. That's our new wave. There's, like, the local people who… we have a lot of long-term subs. We have six in the building.

Carter's description of the EBE staff as comprised mainly of "local people" is reflective of themes in rural education research about how attracting teachers to rural locales can be difficult (Cowen et al., 2012; Streams et al., 2011), how teacher placement patterns show limited distance to home high schools and colleges (Boyd et al., 2005; Fowles et al., 2014; Miller, 2012; Reininger, 2012), and how there is therefore a need to develop the skills and expertise of teachers who are already in rural classrooms. These are teachers like April, Sophie, and Teresa, three of the second-grade teachers who all have children that currently or previously attend EBE and who all came to the profession as long-term substitutes before seeking alternate paths to certification outside of traditional teacher education programs.

The circumstances that surround staffing, recruitment, and retention in schools like EBE, along with rural education research's historical proclivity for deficit framing of rural schools,

necessitate the kind of asset-based, responsive orientation afforded by place conscious paradigms. On a general level, reading policy in Colorado exerts pressure on all schools statewide, as they work to comply with teacher training and curriculum mandates and grapple with media messages about "Colorado's reading curriculum crackdown" on reading instruction (Schimke, 2022; Cox & Johns-O'Leary, 2024). But because of longstanding narratives about something being "wrong" with rural schools or the assumption that rural schools will inevitably fare worse than their urban or suburban counterparts, rural schools offer special insight into both the local impact of SOR policy and into how collaborative, place conscious research might be a tool in negotiating those impacts.

According to Reagan et al. (2019), place-conscious research recognizes that place matters in how researchers pose and investigate research questions related to rural communities, meaning that (a) context must be viewed not just as a static set of conditions existing in the background, but as something to be worked within, and (b) the label of rurality, while predicated on geography, demography, and economy, is also a cultural construct defined and upheld through the ways people talk about and enact the word "rural." Another cornerstone of place-consciousness, or a place-conscious paradigm, is the concept of rural social space, "the set of relationships, actions, and meanings that are produced in and through the daily practice of people in a particular place and time" (Reid et al., 2010, p. 269). When research takes those relationships, actions, and meanings seriously and recognizes their connection to place, they can be leveraged as resources in, for example, teacher education programs (Reagan et al., 2019).

I strived to document my understanding of such resources through field notes, jottings, and sense-making conversations with other members of the research team, all to capture what made it unique as a place. In many of my field notes, I described driving along the interstate on

the way to the school, taking the appropriate exit, and noticing an abundance of construction vehicles and signs advertising newly constructed homes for sale, including those in a neighborhood whose website advertised homes for sale starting at $400,000 and alluringly described the town as a "historic town [that] is emerging onto the [metro area] housing scene for its affordability, commutability and friendly atmosphere." Some teachers at the school live in a neighboring metro area or suburbs and described how much the town was changing as it became a bedroom community for commuters to the metro area. Yet many teachers talked to me about how amid transition in the community via so much new construction, there remained a "small-town feel."

Striving to learn about that "small-town feel" was part of adopting a place-conscious in my work with teachers. I came to understand it in terms of, among other things, a deep relationality where teachers and staff at the school knew families personally and intricately, with connections spanning generations, as at least three current EBE teachers had attended the school themselves as children. In 2023, I attended a community event, a talent show to fundraise for arts programming in the school, and saw this relationality in action, observing my teacher partners embrace and catch up with a host of families and community members, explaining to me with wide smiles, "I taught his brother years ago and now he's graduating!" or "I taught her mom back in the day!" A place-conscious approach to research, which is committed to valuing and utilizing the existing strengths of a rural place, allowed me to notice these kinds of interactions and relationships and understand them as rich resources in the rural social space. Such an approach is especially necessary now, because of the intersection between a highly contentious reading policy climate, which affects all teachers of reading, and a long-standing proclivity in rural education research to conceptualize rural schools as in need of intervention.

At EBE, the research team and I strove to bring a place conscious model to our design of the PD partnership in a other ways, too, from the inception of the partnership in 2021. First, we prioritized relationship building in order to learn the complexities of the "rural social" space at EBE. We spent a full school year visiting EBE, focused on understanding the nuances of the school, teachers, and students, before initiating any formal research component of our work. During that year, we engaged in a range of relational activities focused on building trust and knowledge of EBE as a place. These included sustaining a consistent, twice-weekly presence at the school to immerse ourselves in the everyday life of the school by participating in out-of-school events like a community talent show, attending in-school meetings and planning sessions, supporting whole-school assemblies and parties, and sharing in meals, phone calls, and a myriad of informal interactions with our teacher partners.

From this immersion, we learned things about the EBE school community and about the teachers with whom we worked that deepened our collaborations and made them more responsive to how EBE, as a local context, experienced top-down reading reform. For example, one teacher, Theresa, was teaching second grade for the first year while her youngest son was in first grade. At the beginning of the year, after a few weeks of co-teaching with me and inviting me into her classroom for demonstration lessons, Theresa told me more about her first grader, including that he was receiving intervention services in reading, and asked about ways of helping him learn to read what his teacher was calling "sight words," words that appear frequently in children's text that students need to be able to recognize automatically, on sight. Before SOR-inspired reform in Colorado and the prominence of SOR-aligned curriculum that emphasizes the mapping of sounds to letters, the most popular, widespread method for teaching children to read

these kinds of words was memorization. Reflecting the pre-SOR status quo, Theresa's child's teacher was directing parents to have their children memorize various word lists.

Theresa's reaction was interesting and reflected her dual identity as both a teacher and a parent at EBE. Intuitively, Theresa could tell the memorization strategy was not right for her son and inquired about an alternative, which I provided by modeling a word mapping routine with students in her classroom. She later sent me a video of her son independently completing the steps of the word mapping routine and explained in her end-of-year interview that her experience with her son helped her "see the value in the Science of Reading." This experience with Theresa, in which she described and acted upon SOR methods from her perspective as both an EBE teacher and an EBE parent was significant for our collaboration and for her own learning. It was only possible by retaining a spirit of curiosity about "the set of relationships, actions, and meanings" (Reid et al., 2010, p. 269) enacted at EBE, paying attention to how teachers like Theresa relate to the SOR policy movement within their own context and from various vantage points.

As Theresa's story illustrates, a place-conscious approach to school-based research insists that local factors are salient for analysis, just as Theresa's teacher and parent identities were salient both for our collaboration around reading instruction and for inquiry into that collaboration. In addition, though, place-consciousness involves two things that are particularly important for understanding contemporary reading education. The first is the idea that knowledge about "best practices," which should work for all students, can (and should) be triangulated with knowledge about place and the types of practices that will serve particular students in particular classrooms in particular communities. Eppley et al. (2018) elaborate on this principle, suggesting that alongside evidence-based practices, which rely on experimental

designs to ensure the generalizability of findings, there must also be room for practice-based evidence, or context-specific, in-the-moment data about students and classrooms, with no expectation that one intervention will produce universal outcomes across time and space (Eppley et al., 2018).

Specifically, when research with teachers like those at EBE focuses on coordinating evidence about how *all* children learn to read with evidence about how children in a given *context* learn to read, a possibility emerges to reframe the local context not as an impediment to implementing science-based instructional practices, but as an opportunity to learn more about those practices and how they work (Eppley et al., 2018). One such practice, in the case of EBE, was the adoption of a suite of new, SOR-aligned literacy assessments that the administrator team hoped would generate skills profiles for students, clarifying their instructional needs in terms of foundational reading skills, reading fluency, vocabulary, reading comprehension, and more. This set of assessments consisted of a more formal, computer adaptive test called the *i-Ready Diagnostic,* a formative literacy assessment with a battery of subtests by grade level called Acadience, and a quarterly inventory of high frequency words, organized by phonetic spelling pattern, that children would read by sight, without sounding out. In January 2024, the second-grade teacher team spent their planning meeting analyzing data from these three literacy assessments in order to create updated instructional groups for the new year. As a participant-observer in that meeting, I witnessed the teachers interpret the assessment data, which had been granted a particular weightiness because of its alignment to the SOR.

Significantly, though, the teachers supplemented the story told about children by assessment data with their own insights and observations about students' reading behavior from the classroom. For example, during a discussion of one particular student and whether that

student should be added to an instructional group focused on phonics versus reading comprehension, Sophie explained that although the high frequency word assessment indicated this student could not yet read words with a particular spelling pattern, she had just observed the student reading a book containing that spelling pattern during small group instruction. Sophie then pointed to the student's score on the phonics section of the *i-Ready Diagnostic*, where the student's response pattern had been categorized as on-grade level, remarking that she "just didn't know what was going on with [student] that day [when the student took the high frequency word test]. Maybe she just had a bad day" (Field Notes, 1-3-24). In this way, Sophie was triangulating the results of one assessment, the high frequency inventory, with her own observations of the student's reading in practice and an additional, more summative assessment, the *i-Ready Diagnostic*, to understand her student's reading needs and skills profile. In so doing, she suggested that a tool like the high frequency word inventory, which was organized by spelling pattern and therefore purported to be one of the "best" practices recommended by SOR reform, should not necessarily have the final word in painting a picture of students' literacy development. Painting that picture must also draw on other information, including evidence about students' needs, assets, and interests that teachers glean from their own practice. In this case, it all culminated with the team of teachers deciding not to place the student in the group focused on phonics and other foundational reading skills.

Carving out a place for this kind of practice-based evidence alongside evidence-based practice is one facet of place conscious paradigms that I contend is especially valuable in the era of the SOR. A second, equally valuable characteristic of place consciousness involves researchers and teachers collaborating to learn about local literacies in order to leverage them in classrooms. Bomer & Maloch (2012) elaborate by first describing disparities in school success

as the natural byproduct of misalignment between children's local literacies–how children use language and text outside of school–and the institutionalized literacy of school–how school reifies certain literacy practices and makes others invisible.

Yet possibilities abound for educators and education stakeholders to explore students' local literacies and creatively incorporate them into classrooms and instruction. As Bomer and Maloch (2012) explain, "there are teachers who are really committed to learning from their students, honoring their language, literacy, and stories, who invest continuous energy in maintaining an open, curious, listening stance toward their students' lives for their own sake" (p. 48). With a more specific illustration of how the commitment to notice and honor local literacies might unfold in classroom settings, Lester (2012) included a vignette from a teacher who designed learning experiences that synched up a place-based education framework with academic standards. By doing so, the teacher communicated that students' own community was something worth learning about while simultaneously providing opportunities for students to develop their reading and writing skills in ways aligned to state standards (Lester, 2012). These insights from literature about place-conscious teaching, learning, and research clarify that one cornerstone of a place-conscious approach is the insistence that there are strengths and assets embedded in the contextual particularities of a place, including rural places, that represent valuable opportunities for making instruction more meaningful for students (and teachers).

This idea that a meaningful education is one that sees students as learning in a particular context that matters finds resonance with equity arguments that have emerged in the SOR movement, by researchers who encourage attention to interpretivist, context-specific questions/inquiries (Jensen, 2021). At EBE, though, there were complexities and challenges in achieving the place conscious vision of attention to context, celebration of local literacies,

alongside implementation of SOR-inspired, state-mandated practices for teaching reading. I see those complexities as falling into two main categories, one that is related to statewide SOR legislation, including, as discussed previously, the rhetoric that can accompany such laws about reading, teaching, and teachers, and the other that is related to what EBE was experiencing as a rural school community.

At EBE, our partnership was built on a principle of being responsive to the school partner's expressed goals and needs in concert with researchers' areas of expertise. Thus, the research team's collaborations with teachers and administrators mostly centered on supporting goals like implementing SOR-based practices in classrooms, facilitating SOR assessment data analysis, and being part of schoolwide efforts to bolster student performance in literacy. In that sense, the school administrators seemed to view all their initiatives around literacy, including the decision to partner with university researchers, as driving toward improvements in schoolwide student achievement data. For instance, when co-facilitating a PD session with me about flexible, skills-based instructional groupings, a tool that could have been framed as primarily being about differentiation, the EBE principal emphasized that this approach would help the school solve a data problem in which EBE students' grade level proficiency numbers on state tests had been "slipping" over the past three years (Field Notes, 9-16-23). In another moment from the three years of partnership at EBE, I began focused work and co-teaching with a first-grade teacher in the final months of the 2023-2024 school year at her request after she reported being told that her teaching contract would not be renewed unless her students' scores improved on the more summative *i-Ready Reading Diagnostic*.

As a former elementary teacher and K-1 instructional coach, it comes as no surprise to me that improving student achievement data would figure so prominently into administrators'

vision for instructional staff or affect teachers so profoundly. What is significant, though, is how the preoccupation with achievement data, a longstanding trend in elementary education, intersected with the SOR, SOR legislation, and this school-university partnership. Rather than seeing our collaborations as an opportunity to learn about students' local literacies, as encouraged by place conscious paradigms, teachers and administrators consistently expressed the hope that working with us would help them implement SOR-aligned instructional practices in ways that increased EBE student scores on the *i-Ready Diagnostic*, which the school used summatively, as well as on state standardized tests. This focus was significant both because it reflected the tangible aims held by our school partners and because those aims were on-the-ground manifestations of a policy context in which, as Aukerman & Chambers Schuldt (2021) explain, assessed reading proficiency looms large. Further, the school's focus on reading achievement data, stoked as it may have been by policy pressures and the rhetoric of the SOR movement, was something to which we strived to be responsive, thus limiting how fully we realized a place conscious vision to investigate, honor, and leverage multiple, local literacies.

Why else was achieving this vision complicated at EBE? One reason had to do with elementary reading policy, and another is related to particularities of the school community, especially what our partners described as a "changing population" at EBE. The first mention of this occurred in 2021 in a meeting with the former EBE principal and the now retired superintendent. In a field note from that visit, my jottings captured an exchange with the superintendent in which she explained that the town where EBE is located was experiencing immense population growth due to new construction and people relocating to have easier access to the closest metro area. Like others would later do, the superintendent connected this population growth to a rapid rise at the school in students who are bilingual or classified English

language learners (ELLs). As a result, according to the former superintendent, teachers are "facing a body of students they never have before" (Field Notes, 12-6-21). For that reason, she saw literacy PD offered by our research team as a way to continue "adding tools" to teachers' toolbelts to "equip [them] for the battle ahead" (Field Notes, 12-6-21). We later learned more from other staff members who elaborated on this theme, including that 2021 was the first year where the school staffed a full time English Language Development (ELD) teacher and that by longtime EBE teachers' estimates, the number of ELL students at EBE has "basically quadrupled" over the past few decades.

The former superintendent's word choice is striking, with the battle metaphor demonstrating how deeply EBE practitioners felt the impacts of a "changing population." Like pressure from SOR policy mandates and their accompanying narratives, I see this phenomenon as something that made it difficult to bring to bear a central facet of place consciousness at EBE, namely the celebration and cultivation of local literacies in the classroom, especially out-of-school literacy practices. At EBE, those literacies involved the bilingualism and biliteracy of students classified as ELLs. Attending and seeking to expand teachers' repertoires for instruction that may serve children well, as well as devoting resources to a full-time ELD teacher could be read as important priorities and did not in and of themselves indicate deficit perspectives of the children. Yet the framing of a battle, invoked by the former superintendent, underscores a view bilingualism as a problem to be solved. When this discourse about concerns for the school's ability to address new students' language and learning needs converged with intensive policy mandates for reading instruction, the focus of our EBE school partners zoomed in on harnessing available support for reading instruction, thus edging out a focus on out of

school literacies or language practice. As a result, it was challenging to encourage attention to out-of-school literacies, including biliteracy, that place conscious paradigms urge and support.

Indeed, being place conscious in our approach to school and classroom-based education research requires a commitment to learning about local literacies to leverage them in instruction. That proved to be difficult at EBE for reasons having to do with both statewide reading policy, which ushered in a data-focus on testable literacy rather than other kinds of literacy, and the complexities of a rural school experiencing demographic change, which carried with it a range of teacher perspectives on the literacies of the students they teach. Likewise, place consciousness involves putting multiple types of evidence into concert with one another. It is not about eschewing findings from the evidence base about how children learn to read but contends that instructional practices aligned to the evidence base must be integrated with reflections about what it means for children to learn in distinctive classroom and community contexts. This aspect of place consciousness came a bit easier at EBE, as demonstrated by Sophie's reflection on her student's reading development, which included information provided by the high frequency word inventory, a SOR-aligned assessment, supplemented by insights about the student from her own practice.

I have a distinct purpose in describing features of place conscious paradigms and providing snapshots of my attempts to bring place consciousness to over three years of partnership at EBE. Namely, what I hope to suggest is that even when it proved to be complicated and difficult to bring to life, the principles of place consciousness are valuable in an era of SOR reform because of the SOR's tendency to de-emphasize issues of local implementation in favor of generalizable patterns about reading or reading instruction that should work anywhere, regardless of place. Studying collaborations between researchers and

practitioners through a place conscious lens is also important because foregrounding equity in the contemporary SOR policy landscape requires understanding the local impacts of reading policy, including how local actors adapt and implement it. Place conscious paradigms direct our analytic attention to those issues by emphasizing ways to triangulate evidence-based practice with practice-based evidence and centering local literacies in classroom instruction. These features of place consciousness as a conceptual approach can deepen inquiry with teacher colleagues and, just as significantly, represent a path toward the type of equitable SOR Jensen (2021) describes, one in which reading instruction is both effective, informed by the evidence, and asset based, animated by teachers' knowledge of students' identities, place, and the rich literacy practices they engage outside of school.

Methodological Approaches Foregrounding Place and Collaboration

Thus far, I have endeavored to describe the type of approach to research necessitated by the contemporary policy context around elementary reading instruction, using literature from rural education research, commentaries on the SOR reform movement, and anecdotes from the multiple years of partnership between EBE and researchers. It is an approach conceptually grounded in place-consciousness that urges us, as stakeholders in reading education, to attend to a range of literacies, beyond just the bounds of assessed reading proficiency, and to reconcile generalizable evidence-based practices with the nuances of unique children learning in unique classrooms. Drawing on anecdotes from multiple years of partnership at EBE and an overview of state literacy policy in Colorado and across the U.S., I have contended that a place conscious conceptual approach to literacy and/or rural education research might help push forward a vision for equity in the SOR described by researchers like Jensen (2021) because it insists that local

contexts hold a myriad of attention worthy assets for reading education reform, as well as unique challenges that can be better understood by attending to place conscious paradigms.

But *how* might researchers study and employ this approach? I submit that one possibility for answering this "how" question involves methodological approaches like RPPs that foreground collaboration, even (and especially) when that collaboration is messy and fraught. In this section, I elucidate some features of collaborative methodological approaches including RPPs, beginning with some shared definitions of RPPs and the framework upon which RPPs are based. Then, I describe two particularly generative features of RPPs: their attention to processes for (rather than products of) collaboration across institutional and other boundaries. I again interweave stories from my own collaborations with EBE teachers on literacy instruction to provide illustrations of these features of RPPs and to continue making the case that these kinds of methodologies, alongside place conscious paradigms, are beneficial for studying the SOR and pursuing equity in a SOR era.

To appreciate what I am suggesting about RPPs, it is helpful to begin with a definition. Coburn et al. (2013) define RPPs as "long-term, mutualistic collaborations between practitioners and researchers that are intentionally organized to investigate problems of practice and solutions for improving district outcomes" (p. 2). Deepening the definition, Penuel et al. (2015) explain that RPPs provide a way of resisting what they call "the translation metaphor," the assumption underpinning many education reforms, including SOR reform, that suggests that education research singularly identifies effective interventions that must be "translated" to teachers for them to implement in ways that are accessible to any and all students. The SOR movement is certainly tinged with elements of the translation metaphor, as I have examined in the second article from chapter five, which explores teachers' desire to access formal knowledge associated

with the SOR evidence base. Vaughn et al. (2022) describe this as the SOR's penchant for reducing teaching reading to a technical act where teachers simply impart knowledge to students, rather than adapting their instruction in light of children's experiences, languages, and literacies. Such reflections demonstrate the ways in which the SOR research, with its positivist affiliations, elevates a set of evidence-based practices that are meaningfully and/or causally associated with literacy outcomes. Consequently, reform inspired by this research can assume that such practices simply need to be translated into every elementary classroom across the U.S.

Researchers providing commentary on the SOR have responded to this assumption by urging additional classroom-based, translational studies (Yaden et al., 2021) and paying attention to how SOR-aligned interventions work in diverse settings, especially rural settings or settings with children living in poverty (Terry, 2021). Methodologies like RPPs can help answer these calls because they address the limitations of the translation metaphor and the SOR's emphasis on empiricist research (Yaden et al., 2021). RPPs strive to provide generative ways of understanding the complex connections between education research and practice and any role research might play in educational improvement by not assuming the "right" content and practices simply have to be transmitted to schools and classrooms and instead opting for an "alternate conceptual framework that more adequately accounts for the complex and difficult challenges researchers and practitioners face together" (Penuel et al., 2015, p. 183).

By rejecting the idea that connecting research and practice involves a one-way transmission of knowledge, RPPs suggest that the most important thing to understand is the often-messy processes engaged by researchers and practitioners as they mutualistically learn what research might mean for practice and what practice might mean for research (Penuel et al., 2015). Against the backdrop of top-down reading education policies seeking to transform

classroom practice, RPPs provide a context and platform upon which to challenge a view of teachers as technicians who passively receive formal knowledge from a research base and then seamlessly impart it to students. To ground methods and methodologies in an RPP framework is to insist that knowledge flows in a multi-directional path between researchers and practitioners when partnerships are based on reciprocity and shared ownership of problems (Penuel et al., 2015). This view of knowledge is part of the premise of RPPs, and it is deeply compatible with the larger goal of finding agreement between the call to implement evidence-based practices and the commitment to thoughtfully value students' identities, including their connection to place. Rather than privileging one type of knowledge, such as scientific studies of reading that might be the purview of university-based researchers and academics, RPPs insist that what researchers know and want to learn must be held side-by-side with what practitioners know and want to learn.

There are numerous examples from the years of partnership at EBE where the research team and I endeavored to do just that, to hold what we wanted to know alongside what our teacher and administrator colleagues wanted to know, in order to be responsive to their priorities, goals, and curiosities. This ongoing commitment to responsiveness—to listening to and taking seriously our partners' interests in addition to our own—was especially important because of how much change EBE saw from year to year, including significant turnover in administrators. Although all were enthusiastic about the partnership, each school year brought a new principal/assistant principal team from 2021 to 2024, each with varying goals related to literacy instruction in their school. Initially, as literacy researchers, we were interested in learning how teachers might set goals and work on practice together, through a model for professional learning called a Learning Lab (LL) in which teachers, in collaboration with researchers, direct their own

inquiry and engage in shared classroom enactments (Ghousseini et al., 2022). Since these lab-style collaborative structures have been explored mostly in in urban areas (Gibbons et al., 2017; Schneider Kavanagh et al., 2022), we believed engaging them in a rural school, in connection to literacy instruction, might produce helpful knowledge for the field, while responding to school partners' goals. Although this did match with the first administrator team's goals, responding to a new team's goals made it necessary to broaden our inquiry and to let go of a focus on LLs, per se, in order to live out the methodological imperatives of RPPs around shared ownership of practice-based aims.

We found that particularly in the second year of the partnership, our teacher and administrator partners were less drawn to a constructivist, inquiry-based structure like a LL and were instead eager for support in delivering whole-school PD that might help get everyone "on the same page" when it came to certain methods for teaching reading. For instance, in February of 2024, a group of ten EBE teachers and I attended a local literacy conference together. In one session we attended, the facilitator outlined a replicable, cross grade level instructional routine for helping children learn high frequency words by mapping letters to sounds (the same routine that I shared with Theresa when she inquired about helping her son). When the teachers and I returned to the school and told the principal and assistant principal about the conference, including this session, the principal seemed drawn to the idea of me providing a version of it for all the teachers who had not been able to attend the conference.

So, rather than insisting on a lab-style approach to professional learning or turning down the principal's request that I bring the content of the conference back to EBE, I facilitated a whole-staff PD session in March 2024 that walked teachers through this word mapping routine and contained much of the original content of the session from the literacy conference. When

introducing me during the after-school PD at EBE, the principal spoke to the teachers about how the instructional routine I would describe and model was something that needed to be normed—or the same—across grade levels at the school. That desire for sameness on key SOR content and methods was important for the principal and assistant principal and they believed we, as university-based researchers could play a vital role in actualizing it for the school. To bring to life the kind of mutuality and reciprocity upon which RPPs are based, we prioritized responsiveness to practitioners' interest in supporting schoolwide norms around reading instruction, in addition to closer collaborations with one grade-level team, including opportunities to co-teach in their classrooms. Our decisions to orient our collaborations with administrators and teachers around the issue that was most pressing to them felt particularly important in the context of a high-profile top-down policy mandate, the Colorado READ Act, as well as the lack of access some rural schools such as EBE have to school-based professional development (Erickson et al., 2012).

In my mind, this was one of the most significant lessons at EBE and a crucial illustration of the value of place-conscious collaborations using methodologies like RPPs in a SOR era. We know from scholarship on current SOR reforms, including many that have discussed issues of equity within the movement, that there is a tendency to pathologize teachers, how much they know, and how well they teach, thus assuming a version of the translation metaphor which contends that teachers simply need to learn the "right," SOR-aligned content to solve all problems with elementary reading education. Rather than leaving teachers, administrators, and other practitioners out in the cold to grapple with the limitations of that assumption, RPPs urge literacy researchers to do the work *with* their partners, remaining open to and steadfastly collaborative on challenges like the norming issue raised by EBE administrators. By following

the threads of that issue and demonstrating to teachers and administrators that we would be engaged thought partners on how to norm certain practices across the school, our research team was able to accomplish a number of things that are key in this moment in literacy education: (a) actively pushing back against deficit narratives about teachers, including the message that they or their practice must be "fixed" by learning the SOR evidence base, (b) taking guidance from practitioners' on-the-ground priorities to make collaborations responsive and organic, rather than being driven by researchers' a priori interests, and (c) contributing to the field's understanding of local implementation of the SOR, attending to context and providing insight into an equitable, equity-focused SOR.

Besides the commitment to cultivating a sense of shared ownership on issues that matter to both researchers and practitioners, an additional feature of methodologies like RPPs is their attention to the collaborative processes between partners. Understanding these processes of partnership also means illuminating practices and relational activities that do not always receive attention in education research, which opens the possibility for methodologies, like participatory design research (PDR), that critique normative hierarchies of power while remaining committed to being impactful in the present (Bang & Vossoughi, 2016). At EBE, I endeavored to engage these relational activities through all the years of the partnership and remain curious and analytical about how they fit into ever-circulating hierarchies of power in and outside the school building. My end-of-year collaborations with Sarah, the first-grade teacher whose job was on the line, provide an illustrative example. As mentioned previously, Sarah received word from the principal in late February 2024 that her students needed to show more growth on the *i-Ready Diagnostic*, or else Sarah's teaching contract may not be renewed the following school year. Understandably distressed by this news, Sarah came first to the second-grade teachers with

whom I had been collaborating closely and then to me, asking for help in producing the kind of change in student scores needed to secure her position. Embedded within this situation were a myriad of phenomena worthy of critique: the reduction of children and their learning to growth scores on a summative assessment, the restriction of reading and its sociocultural dimensions to only measures of assessed proficiency, the unfairness and pressure of tying a teachers' job security to assessment, and more.

Yet, per Bang and Vossoughi's (2016) words, I strived to hold those critiques alongside the need to find meaningful impact with and for Sarah in the present. And so, we began a routine where I spent two days per week in her classroom, either teaching myself or co-teaching with her during the small group reading instruction block. Co-teaching, I found, was a collaborative activity that was both relational and critical of in-school hierarchies. By teaching *with* Sarah, instead of sitting in her back of the classroom cataloguing all the things that needed to change about the way she taught reading, I communicated something significant about our relationship as collaborators, namely that producing a change in *i-Ready* scores was a problem of practice that we shared. Further, in deciding to co-teach, to bounce back and forth between who was "on," and to have lightning-fast check-in points where we conferred about what we were seeing from students and what to do next, I tried, in my own way, to break down hierarchal expectations about teachers versus observers of teachers, including "deeply embedded norms of noninterference in the moment of another's practice" (Ghousseini et al., 2022, p. 217). RPPs and related methodologies encourage decisions like the one I made about co-teaching, which open possibilities for building meaningful, trusting relationships and, at the same time, for disrupting the binary and hierarchal categories/messages that already abound in schools and can be intensified by and though the SOR reform movement.

Conclusion

As I have endeavored to establish in this essay, the policy landscape around elementary reading education is brimming with binaries ready to classify people, programs, and schools into high-stakes, sharply defined, and monolithic categories of effective versus ineffective, research-based or debunked. In such a climate, it is valuable not just to authentically collaborate with teachers, but also to bring a spirit of curiosity and openness to how processes for collaboration unfold. RPPs provide a methodological means for fostering that kind of curiosity by eschewing the idea that research can seamlessly be translated into practice and by emphasizing a sense shared ownership between researchers and practitioners. At a time when teachers and teaching tend to be judged according to a singular construct—their alignment to "the science"—RPPs urge a dialogic perspective that holds that the formal knowledge base can be deepened by research taking practice seriously and vice-versa. In doing so, RPPs also find a methodological compatibility with a both/and definition of an equitable SOR, one that makes room for reading instruction to be effective in teaching the skills most predictive of school success and meaningful in connecting to children's lived experiences, identities, and literacies.

Alongside RPPs, place conscious paradigms also hold particular value in the SOR era. Given that the knowledge most valorized by SOR reform is produced through experimental designs and traditional scientific methods, place consciousness adds an additional layer to studies of teacher and student learning by insisting that knowledge of place and context matters too. In my work with teachers at EBE, building my knowledge of the school and community, and of the teachers and students with whom I was able to work, was vital in achieving some of our partnership goals and vital to my research. Taking some of the tenets of place consciousness to heart throughout my four years of partnership at EBE allowed me to consider ways in which key

insights from the SOR evidence base might be held meaningfully side-by-side with insights about particular children in a particular classroom in a particular school. Hoffman et al. (2021) described this as "widening the lens" of the SOR, to make room for typical SOR issues like foundational skills, early literacy, and alignment to the science, but also others: adaptive teaching (Vaughn et al., 2022), culturally meaningful instruction (Jensen, 2021), and the reality of an education system rife with historical and contemporary inequities (Terry, 2021), and more. Research that promotes the kind of "wide angle view" of the SOR described by Hoffman et al. (2021) is pressingly necessary in the current policy climate and, as I have suggested, well supported by place conscious paradigms.

Indeed, my primary reason for overviewing the policy climate around reading education, place conscious paradigms, and collaborative methodologies like RPPs is to illustrate how they can synergistically work together to advance equity in SOR reform initiatives. One of my goals at EBE, besides building and sustaining the partnership, was to understand how a policy like the Colorado READ Act is enacted, with all its attendant pressures and complexities. Through the conceptual-methodological combination of place consciousness and RPPs, I came to appreciate that any inquiry about policy enactment must be undertaken with deep knowledge of where the policy is being enacted (EBE), who is enacting it (teachers and administrators), and whom is the target or recipient of the enactment (students). These questions of who and where SOR reform is happening are just as consequential as what policymakers require teachers to teach. As such, they should have a place in the agenda of literacy researchers interested, as I am, in teacher learning, organizational change, and policy implementation.

Chapter Seven: Conclusion

As I conclude this dissertation, I find myself reflecting on an overarching question: how can researchers continue to support and advocate for teachers and children as elementary reading reform continues and the SOR, as a movement, grows in influence? When I left my instructional coaching position in 2020 to begin graduate school, the movement had not become as prominent as it is today. I feel very fortunate to have spent the past five years immersing myself in the SOR evidence base, thinking about ways to study SOR policy and policy implementation, and, most importantly, spending time in elementary classrooms, with children, teachers, and administrators.

This dissertation represents my attempt to synthesize what I have learned, knowing that there is so much more on which to build as I, and the field of literacy education, continue to explore SOR, policy, teacher learning, equity, and more. For now, though, I conclude by discussing key areas of learning gleaned from my study. In the current climate around elementary reading education, one valuable path for studying SOR policy implementation involves building authentic partnerships with in-service teachers (Article 1) that center and seek knowledge of ecosystems of a particular school context (Article 3). In doing so, it becomes possible to turn attention away from evaluative lenses on individual teachers, their knowledge, or their practice (Article 2) to elevate fair, agentic, and multidimensional positionings of teachers, even amid rhetoric that emphasizes crisis and accountability. This final chapter summarizes some of the implications of my study by elaborating on: the value of partnerships, the need for knowledge of the ecosystem of a school, and the positioning of teachers.

Partnerships

Building and sustaining the PD and research practice partnership at EBE has convinced me that to unlock everything that the SOR has to offer and avoid some of the pitfalls of top-down

policy implementation, researchers must prioritize working with teachers in some of the ways that I tried to work with Kay, April, Sophie, Theresa, Kristy, and Carter. In my study, this involved cultivating close personal and professional relationships, doing the work of SOR-aligned teaching and instructional leadership alongside them instead of at any kind of remove, being responsive to their needs, and remaining curious about and committed to capturing their perspectives and meaning making. This is an incomplete list of *what* I endeavored to do in partnership with EBE, but *why* are those things important, especially now? For one thing, those approaches address an issue that has and continues to confront rural schools like EBE, namely the ability to access place-based, relevant professional learning experiences relevant to school and teacher needs and goals. Much of the literature on rural education explores issues of access to professional development in rural schools and districts, including, for example, how online PD might help (Erickson et al., 2012). On the ground at EBE, I consistently heard teachers give voice to this issue, too, lamenting that the district only had one instructional coach across K-12 who was stretched thin and could not always speak to an elementary audience. What they wanted, they said, was help implementing PD topics with their own students, in their own classrooms. In any era, even in the absence of mandate-heavy reform like the SOR, access issues faced by many rural schools make them rich and important sites for partnership between practitioners and researchers.

Yet the elementary reading policy context does indeed imbue such partnerships with even more importance. School-embedded research can contribute to much needed classroom-based translational studies that demonstrate how scientific findings about reading development come to life in actual elementary reading classrooms. As Seidenberg et al. (2020) point out, reading science is one thing—comprised of empirical findings, generalizable patterns, and explanatory

theories—and educational practice is another—consisting of questions like what to teach when, how to teach it, and how to help teachers learn it. Drawing lines of connection between these two, between science and practice, is a rallying cry of many researchers (Yaden et al., 2021), including those who urge doing so in ways that do not lose sight of interpretivist issues in educational practice, like making instruction culturally meaningful (Jensen, 2021; Terry, 2021).

I see research about partnerships like mine at EBE as poised to make those kinds of connections. With my second-grade teacher colleagues and administrators, I was constantly thinking through ways of bringing what I had learned of SOR research to the everyday life of EBE classrooms. In one small but meaningful example, Theresa and I worked together to make a beginning-of-year change to her method for having students practice their weekly list of spelling words. Previously, she had instructed children to "rainbow write" the words, copying them and making each letter a different color. After discussing with me one of the most foundational precepts of the SOR research, the empirical finding that the brain does not learn or store words as whole units, Theresa decided to make a shift. Now, to practice their spelling words, she would say a word aloud and students would segment each word into sounds (e.g., the word *ship* into the three sounds /sh/ /i/ /p/) and then write each individual sound—not letter—in a different color (e.g., *sh* in red, *i* in yellow, *p* in green). Making this change from rainbow writing letters to rainbow writing sounds may seem small on its face, but I contend that these small but mighty moves are the secret sauce that will make the scientific findings from the SOR research base the most impactful for teachers and children. I feel incredibly fortunate to have spent the past almost four years collaborating with teacher colleagues at EBE to make such moves in ways that allowed them to feel supported in their own classrooms with me as a thought partner who knew their teaching context, their students, and their goals for instruction.

Learning with and alongside teachers in this way was only possible through a close, school-embedded partnership that was intentionally dedicated to working on practice together. That required me to tune deeply into my identity as a teacher, remaining ever-ready to teach with my EBE colleagues or teach solo and have them observe, knowing that I might not get everything right, it might not be a perfect lesson, and that the most important thing was that I showed Theresa and the other teachers that I was willing to do the difficult thing they were also trying to do: grow their practice and try out SOR-aligned teaching methods. Because I knew how paramount this was to building trust, because I genuinely adore teaching, and because I am passionate about getting SOR methods into classrooms, it often felt easy and natural to spend my days at EBE in teacher mode, thinking of myself as another member of the second grade teaching team who wanted to shake things up and improve instruction as directly as possible. Adopting an inquiry lens by asking myself questions about my own teaching practice, about my partners' teaching practice, and about our collaboration, required a bit more intentionality on my part. I had to force myself to slow down, to listen and re-listen to recordings of meetings or co-taught lessons, to read PD artifacts like feedback surveys and handouts with a different mentality. Instead of embracing a "let's get things done" mindset, I had to push myself as a researcher to adopt a more analytic curiosity about what we could learn about policy, about place, and about professional learning. School-based partnerships in a SOR era are valuable not just because they can contribute to the field's knowledge of how the SOR comes to life in actual classrooms, but also because they require this kind of toggling back and forth between a teacher identity and a researcher identity, which, in my case at least, proved to be incredibly generative.

Knowledge of the ecosystem of a school

The methods and theoretical framework upon which I drew in this dissertation coalesced toward one main goal: building my own knowledge of EBE as a complex, rich site of policy enactment, worth exploring as an ecosystem in its own right. I aimed all my methodological decisions, such as designing the partnership as an RPP and immersing myself in EBE as a participant observer, toward this goal. As a result, I was able to see EBE not just as another nameless, faceless school, one of many across the state, that needed to comply with READ Act mandates, but as a multidimensional place where teachers, students, and administrators held a range of perspectives and assets worth understanding and exploring. Many scholars have discussed the value of integrating such a view of place and local context into research on policy (Spillaine, 2004, Woulfin, 2015), emphasizing that any critical study of policy must examine what those closest to policy think it means or requires. That imperative to be close to those implementing policy on the ground is why I spent two days per week at EBE, participating in planning meetings, teaching with teachers, eating lunch with the second-grade team, helping with arrival and dismissal, and taking part in the everyday life of the school. Yet there is another layer, something additional I learned about getting to know the ecosystem of a school like EBE in a landscape of SOR-inspired reform.

As I explained in the third article (Chapter Six), my time at EBE has convinced me of the special benefit conferred in a SOR era by literacy research that takes a methodological and conceptual stand, insisting on two important principles: (a) that place matters: what makes a local context like EBE unique cannot be standardized out or away by top-down policy requirements and (b) that collaborations between researchers and practitioners are the most fruitful when they are relational and mutualistic, seeking to establish shared ownership of

problems, without the assumption that translating research and policy into practice is seamless or one-size-fits-all. When literacy researchers build these ideas into their approach to working with teachers, not only is it possible to study legislation like the READ Act in a critical way that refuses to cast teachers as technicians or automatons, but it also becomes possible to locate ourselves in teachers' corners as collaborators and allies who will do the messy work of policy implementation with and alongside our teacher partners.

I have tried to spend my entire career in teachers' corners, and I believe that it is more important now than ever before for teachers and administrators to be able to trust that if they welcome a researcher into their classroom, school, and community, the goal is not to judge or evaluate them or to determine if they are "doing the SOR" "right" or "wrong." Instead, as I have tried to illustrate throughout this dissertation, especially in Article 3, the goal must be to become a certain kind of partner for in-service teachers, one who is doing the work *with* them, building knowledge not just who they are, but also where they teach, in all its complicated glory. At EBE, that meant knowing and becoming immersed in the sometimes-messy building- and districtwide changes that unfolded across all the years of the partnership, such as yearly turnover in administrator positions, which prompted significant shifts in priorities and instructional focus like the introduction of the WIN block, a brand new, whole-school initiative to support differentiation. It also meant tracking and remaining curious about how teachers talk about and leverage what they know from their own practice, as Sophie did when she brought her own observations of a student's reading performance to bear on data from a SOR-aligned assessment. These are just a few of many examples of what it can mean to know schools as complex ecosystems, and place conscious paradigms and RPP designs provide well-documented methodological means for building that knowledge. I am arguing that these approaches are

especially needed in literacy research given a policy climate that has tendencies to dismiss classroom- or school-specific variation as noise that can be standardized out with the "right" methods based on scientific evidence. If a teacher or practitioner read this dissertation, my hope is that they would walk away with an appreciation of that kind of variation, understanding that different people, who occupy different positions, have different relationships to and expectations around the SOR, depending on where they are located in a school's ecosystem. I would hope that this work makes it a bit easier to embrace some of the tensions and complexities in implementing the SOR in a unique school ecosystem and to let go of the idea that it is as simple as doing the SOR "right" or "wrong."

Positioning of teachers

Regarding those instructional methods at the center of current reading reform, I contend that a relevant and under-appreciated part of the puzzle of SOR reform involves how SOR methods are brought to actual schools like EBE and, just as significantly, how they function in the stories we tell about teachers, schools, and the quality of reading education in the U.S. In order for legislation like the READ Act to deliver on its goal of "ensuring that the system of free public schools throughout the state is thorough and uniform" when it comes to evidence-based instruction in reading (CDE, 2019), we all must reckon with the rhetoric issue at the heart of SOR legislation. Such rhetoric, as other researchers have described, can imply that SOR-averse teachers or administrators are akin to enemy combatants in a war (MacPhee et al., 2021), that unknowledgeable teachers or teacher educators are to blame for students' continued underperformance on standardized tests of reading achievement (Wetzel et al., 2020), and that the SOR could serve as some kind of panacea, even in an oppressive education system that has made Black and Brown children vulnerable to experiencing reading difficulties in school (Terry,

2021). If the SOR, as a body of research, is going to have the kind of revolutionary impact on reading education imagined by policymakers, it must be divested from this rhetoric—it cannot continue to feed the narrative machine that suggests that teachers are the problem or that every educational ill can be remedied by "fixing" "bad" teachers.

A recent clip from the morning television show, *Good Morning America*, illustrates how alive and well that machine is and how the SOR can be implicated in it (aired on January 31, 2025). In the clip, Jeanne Allen, the head of the Center for Education Reform, is overviewing U.S. 4th and 8th grade students' performance on the "Nation's Report Card," the National Assessment of Educational Progress (NAEP) assessment, administered every two years. The screen flashes with a summary of NAEP reading scores over the past five years, showing a decline in which 66% of fourth graders scored at or above basic levels in 2019, whereas 60% scored at that same level in 2024. The camera cuts back to the studio, where, with a grave expression, Allen tells the hosts, "Reading continued to slide, even among our most advantaged kids. Our system is broken. Our parents need freedom and flexibility. Our teachers need to be held accountable. And our entire nation needs to focus on this issue and this issue alone." My purpose in bringing up this clip is not to suggest that changes in NAEP scores, especially in reading, are inconsequential or to claim that they should not be a cause for concern among those who want to make literacy education equitable and accessible in the U.S. Like many, including Allen, I find myself disquieted by the latest NAEP scores. However, a reaction to the scores that implies, as Allen did, that the trend in proficiency levels can be reversed by "holding teachers accountable," is highly concerning and problematic.

Individual teachers are not the problem, yet rhetoric in the public sphere can promulgate that persistent myth. Such rhetoric puts individual teachers alone in the crosshairs of reform,

neglecting well-researched, important issues related to student achievement, such as disparities in access to key educational resources (Darling-Hammond, 2004) or the interconnection between high stakes testing and the resegregation of U.S. public schools (Knoester & Au, 2017). Teachers alone are not driving multiple percentage point drops in reading scores on the NAEP. Teachers alone do not need to be the recipients of any kind of crackdown, intervention, or remediation. Teachers alone are not driving the assumed literacy crisis that receives alarmist coverage in the media, as it cyclically has across decades. The discourse about NAEP scores cannot be separated from the equally alarmist language that has surrounded the SOR in recent years, as both target teachers' instruction and lack of valid knowledge as a primary root of the U.S.'s failure to support children to read. As was the case at EBE, there are elementary teachers of reading who feel enthusiastic about the SOR and who are eager to have it permeate their classrooms and catalyze their students' growth. They wanted to be part of improving instruction in their building, they saw the SOR as a crucial part of that process, and they did not need to be pressured to change or align their teaching methods to reading science. Rather, the EBE teachers eagerly jumped into partnership work with me because of the potential it offered to learn SOR methods in context, on the ground, and in ways that could incorporate their knowledge of children as learners and as holistic humans. As such, pathologizing these teachers to imply that they need to be brought to heel through some kind of accountability measure is, in my view, unconscionable. Instead, I contend, much like Hoffman et al. (2020), that teachers must be called into SOR reform and that researchers must actively find ways to push back against any rhetorical assertion of teachers' deficiency when it comes to teaching reading.

The overarching implications I discuss above capture what I have endeavored to do in my dissertation study: utilize methodological and theoretical framing that pushed me to be a true

collaborator and position teachers as colleagues and partners with agency and dimension. Importantly, I made these choices not because I am circumspect of the SOR nor because I harbor any residual loyalty to a previous reading education paradigm like balanced literacy. To the contrary, I am extremely passionate about the SOR, and the greatest joy of my graduate school journey has been working with Kay, April, Sophie, and Theresa to try out SOR-informed practices in their classrooms and to see the delight children can experience when these methods come to vibrant life in instruction. On any one of my twice weekly visits to EBE, you would have found me at a small group instruction table, on the floor with students, or whispering a quick conferral to a teacher colleague about how to refine a SOR teaching technique. All of this happened because I believe in the SOR and the kind of instructional change it can engender. I, like my EBE partners, find myself fired up at the difference SOR methods can make to children's reading development in an elementary classroom. But that change cannot happen alongside any scapegoating of teachers—it must happen by forging real, authentic partnerships with teachers to seek knowledge of their teaching context and position them as key contributors to this influential SOR movement and moment.

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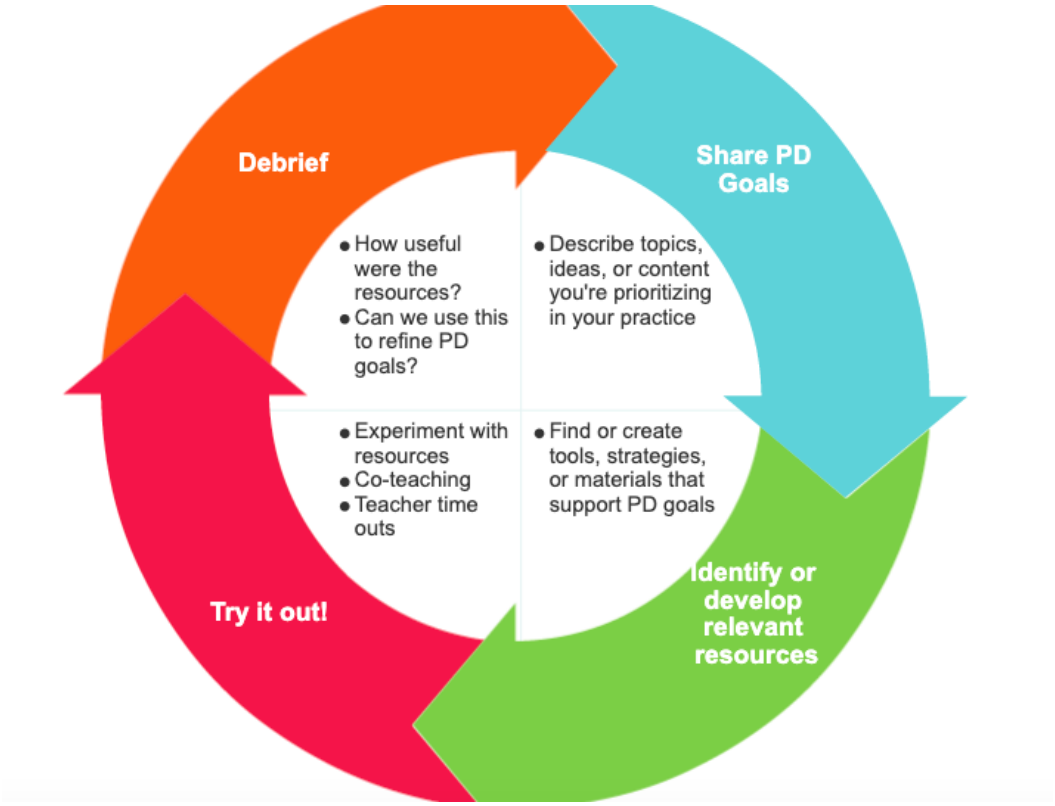
Appendices

Appendix A. Learning Lab Structure



Appendix B. Beginning of Year Interview Protocol

Introduction: Thank you so much for talking with me today. I think I've shared before that in my dissertation at SE, what I'm trying to understand/study is how teachers learn about teaching reading, even as there's a bunch of pressure about that, coming from places like the READ Act requirements, etc. So, with that in mind, there's three kind of main topics I wanted to talk with you about today: (1) your professional history as a literacy teacher, (2) your perspective on what makes PD meaningful, and (3) the things you most want to learn about in the world of reading instruction.

Topic 1: Professional Histories

- Non-obtrusive personal histories: We haven't had a chance yet to swap stories of where we grew up and how we came to teaching. <I share> Could you tell me a little about that? (How did you come to work at <focal school name>?)
- What drew you to teaching and keeps you going as a teacher? What keeps you here at EBE?
- From your perspective, what are some of the most important things about being a reading teacher/teaching reading?
- How, if at all, have the requirements of the READ Act impacted your teaching or the way you think about teaching?

Topic 2: Perspectives on PD

- What does collaboration mean to you?
- When you think about your professional learning as a teacher, what types of PD activities you found most beneficial over time?
- When you think of learning together about teaching (as opposed to, for example, a school leader creating PD for teachers), what do you think of?
- How is our collaboration together, with me involved, feeling so far?

Topic 3: Things you want to learn about

- What, if anything, would you like to learn about or understand better to grow your practice in reading instruction?
- After getting to know your class this year and reviewing their BOY assessment data, is there anything you feel like students need support with that might be something we could explore together? (Follow up: Are there certain topics or things you would like to learn more about to better serve your students?)
- Is there anything you can imagine doing with your team and me this year that would be impactful for your teaching?

Appendix C. Middle of Year Interview Protocol

Introduction: Thank you so much for taking some time to talk with me today. I'm hoping during our conversation we can reflect on the CCIRA conference experience but also talk about your thoughts on PD more generally and also plan for trying out something you learned from the conference together. Just for some background on why I'm asking you about PD today: (a) because we all just had a PD experience together, the CCIRA conference, and (b) because I'm interested in learning how schools improve their reading instruction, and many researchers have said that doing that comes down to three things: PD, curriculum, and leadership. I'm talking with you about PD today and am going to try to talk about those last two things–curriculum and leadership–later in the school year. Let's dig into the world of PD first. I'm going to ask you about four kinds of PD:
PD in terms of a professional conference like the one we just went to
PD in terms of the weekly PLC planning you do with your team
PD in terms of a school-embedded collaboration that could happen between you and me
Your dream PD: what you want/wish for to continue growing your practice

PD as conference: CCIRA Conference Reflection

- What are some of your big takeaways from the conference?
- Which were some of your favorite sessions and why? Which sessions didn't you like as much?

PD as weekly planning in PLCs

Now I'm going to ask you about the time you spend planning each week with your team, so I'm thinking specifically of your Monday afternoon PLCs and the Wednesday planning meetings.

- How, if at all, do these weekly in-school meetings support you in changing or improving your teaching?
- If you had a magic wand and could create any kind of weekly, in-school PD (so not after school meetings, conferences, workshops, etc), what would it look like?
- OR: What do you wish your in-school meetings looked like or involved?

PD that is school-embedded

When we went to CCIRA, that was a very traditional style of PD because we, and all the other teachers, were sitting and listening to a presenter and all the thought about how to take back what we learned was happening in our heads or conversations with each other. Part of what I'm trying to do in working with you all is make PD school-embedded: embedded in the school because I'm here, ready to teach and collaborate with you, instead of being off-site somewhere.

- Is there anything you saw at the conference that you want to work on together, i.e., in collaboration with me? (We're just getting at WHAT that might be in this question and will talk about HOW next)

- HOW: Up until now, a lot of what's happened when we get at something to work on is that you have watched me teach and now I kind of want to get creative about working on <topic/strategy from last question>. Here are some possibilities of what we could do together, and I'm curious which sounds the best to you:
    - Co-teaching: We could teach it together, along with <teammate>, by signing up to lead different parts of the lesson so we could all see each other teach
    - Record and reflect: You could decide how you want to try __ in your classroom, record yourself, and we could have a conversation about it afterward
    - Something else: What do you think would work well? (e.g., a demo lesson: You could just watch me try it out if you want to, as we've done before)

Dream PD

I just want to close by asking you about what your dream PD would look like.

- If there were no constraints and the sky were the limit, what kinds of experiences or resources would you want to help you grow and learn as a teacher?

Appendix D. End of Year Interview Protocol

Introduction: In my dissertation, I'm trying to learn about how schools go about improving their reading instruction. There are researchers who've suggested that doing that comes down to three things: PD, curriculum, and leadership. When I interviewed you last, right after CCIRA, I asked you about PD. Now I'm going to ask you about curriculum and leadership. It's really important to me to get teachers' perspectives on these things and how they work, so as always, I want you to be super honest and open with your thoughts.

Curriculum

- In your view, what should an effective reading curriculum do or accomplish?
- How well do you think the reading curriculum used by your school does those things? (Follow up prompts: What does HMH do well? Where does HMH fall short?)
- Sometimes what happens at schools trying to implement the SOR is they use the provided curriculum somewhat but then pull in other resources and materials to supplement or modify the curriculum. How would you describe how you or your team has been modifying methods or materials associated with HMH? What do you think is the result of that?

Leadership

- How would you describe the instructional leadership at EBE? (Follow up: What works well about the leadership here? What do you think could be different?)
- How would you describe (principal) and (assistant principal)'s vision for reading instruction?
- What do you think are/were (principal) and (assistant principal)'s big goals for reading instruction at SES this year?
- How did you come to understand what those goals were? How were the goals communicated?
- (Example if no one can think of a goal: I remember at the beginning of the year that (principal) really was hoping that we would have new language for describing reading groups that didn't involve children's reading levels, i.e. Level B, C, D, etc)
- How does leadership support you in growing in your own practice? If you could have anything you want from a leadership team, what would it be and why?

[Optional/Draft] Science of Reading and Reading Reform

- We've talked a lot this year about the Science of Reading. I'm just curious, what does the Science of Reading mean to you?
- A lot of people have been talking about how the way we teach kids to read in this country needs to change. Do you agree or disagree with that? Why?

- As you think about closing out this year and starting a new school year next year, what aspects of reading do you see as important for kids to learn and experience in second grade?
- If SOR is on their mind and they don't broaden, "SOR and beyond…"

Professional Learning

- Any remaining thoughts on learning we did together, types of learning you wish you had access to, things you want to do together next year.
- How are you feeling about the potential for being involved as a leader in PD for colleagues (videos, co-facilitating a session, etc)?