CHAPTER 3

Professional Learning Designed to Cultivate Continuous Learning and Innovation

Cynthia Greenleaf, Mira-Lisa Katz, Mary Stump, and Gayle Cribb

Watch a related video from the authors at this link.

This chapter examines how a professional learning model (PL) grounded in an instructional framework and its organizational principles and practices create fertile conditions for sustained literacy learning and practice. Over the past 25+ years, thousands of middle and high school teachers have engaged in Reading Apprenticeship PL, developed by the Strategic Literacy Initiative (SLI) at WestEd. This chapter describes the Reading Apprenticeship approach and "makes it real" by following the PL journey of Gayle Cribb, who taught high school history in a small district in northern California for 32 years.

Gayle enacted Reading Apprenticeship in her classroom, participated in the project's inquiry networks, and led schoolwide literacy reform. Her story illustrates Reading Apprenticeship's generative model of distributed leadership and learning, as Gayle becomes a Reading Apprenticeship practitioner, facilitator, coach, co-designer of PL in new environments (hybrid, online), and researcher. We describe how the practices of our R&D organization help Gayle and thousands of teachers across the country thrive through grant-funded opportunities to collaborate, to innovate to meet new challenges, and to validate this work by contributing new tools and knowledge and assisting in the dissemination of these innovations through professional development, presentations, and publications.

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We argue that the outcomes of PL we describe here are best gauged by attending to these long-term impacts and the collegial engagements and diffusion networks intentionally fostered by the project (Penuel et al., 2012; Sun et al., 2013). After relating characteristics of the Reading Apprenticeship instructional framework and elements of the PL model, we then articulate the key principles underlying this PL approach and the structures that support sustained growth for teachers and for the field.

Introducing the Reading Apprenticeship Instructional Framework

As its name suggests, Reading Apprenticeship is at heart a partnership of expertise, drawing both on what subject-area teachers know and do as discipline-based readers and on adolescents' unique and often underestimated strengths as learners. Reading Apprenticeship aims to help students become better readers of a variety of texts by making teachers' discipline-based reading processes and knowledge visible to students and by making the students' reading processes and the social contexts, strategies, knowledge, and understandings they bring to the task of making sense of subject-matter texts visible to the teacher and to one another. Through ongoing *metacognitive conversations* that make these usually tacit processes visible and explicit, students gain insight into their own reading processes and acquire a repertoire of problem-solving strategies with the varied texts of the academic discipline. As depicted in Figure 3.1, Reading Apprenticeship involves teachers in orchestrating and integrating four interacting dimensions of classroom life in order to draw on adolescents' particular strengths to help them develop the knowledge, strategies, and dispositions they need to become more powerful readers, in an environment rich with opportunities for students to learn with complex subject-matter texts.

These four interacting areas of classroom life—social, personal, cognitive, and knowledge-building dimensions—are woven into subject-area teaching through metacognitive conversations. Rather than focus on implementing a specific teaching strategy or strategies (e.g., cooperative group learning, integrated strategy instruction), Reading Apprenticeship engages teachers and students alike in metacognitive, text-based inquiry, thus *learning by doing*. Teachers and students work collaboratively to make sense of texts, while simultaneously engaging in a conversation about what constitutes reading in specific academic disciplines as well as how they are going about it. New knowledge, strategies, and dispositions develop in an ongoing conversation in which teacher and students think about and discuss their personal relationships to reading, larger issues of

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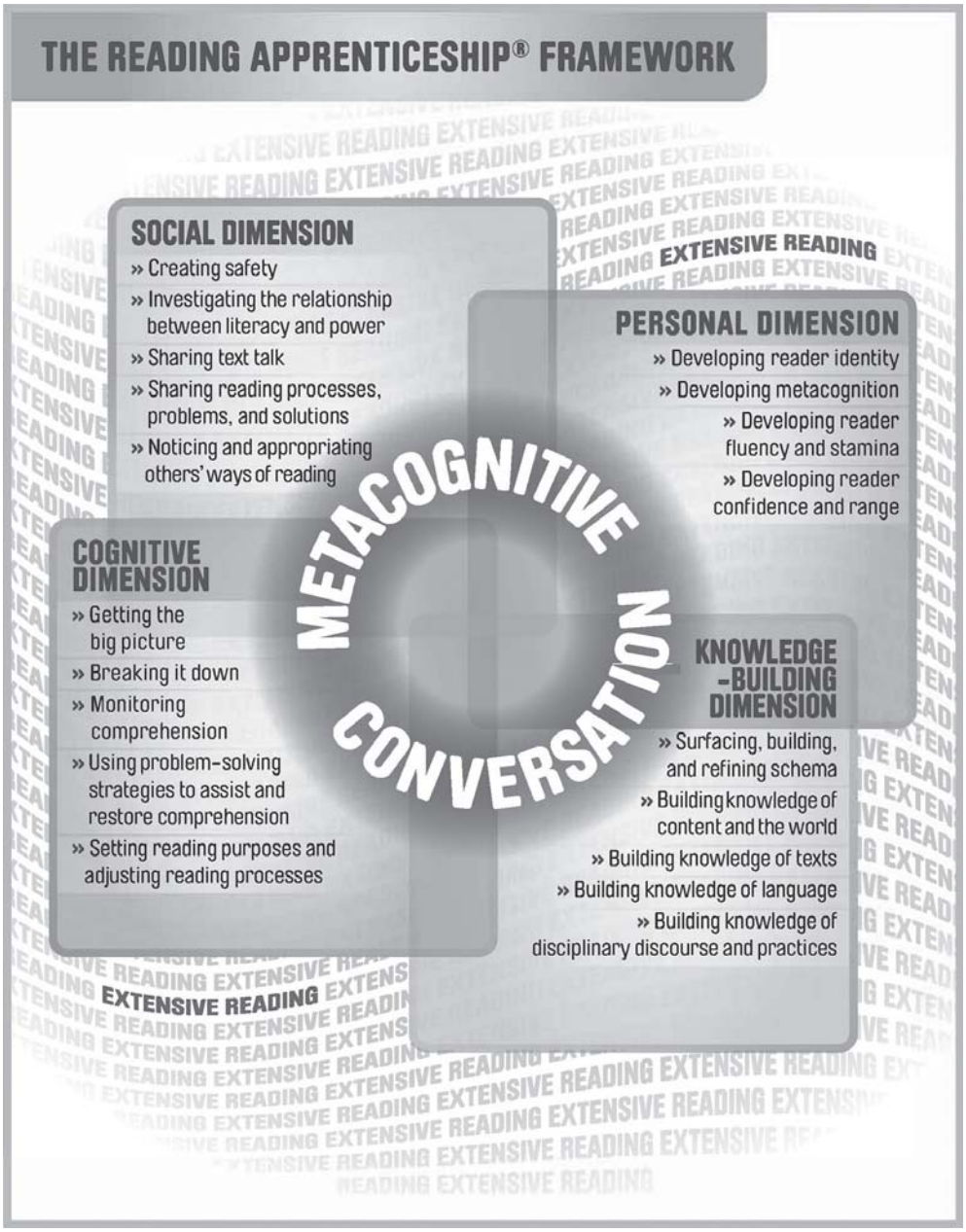

FIGURE 3.1. Reading Apprenticeship framework. Reprinted by permission of WestEd.

literacy and power, the social environment and resources of the classroom, their mental processes, the language structures and varied ways of conveying meaning used in particular types and modalities of texts, and the kinds of knowledge needed to make sense of reading.

Metacognitive conversations occur through many means—class discussions between teachers and students, small-group conversations,

written reflections and logs, think-alouds, and "talking to the text" in annotations. As such conversations and reflections become routine, they offer students ongoing opportunities to consider what they are doing as they read and to assess how well their strategies and approaches are working for them, changing their approach to suit their purposes as they read. Repeated opportunities to make sense of a text individually, in pairs or small groups, and in facilitated class discussions center on students' voices, interpretations, and perspectives, demonstrating their importance and allowing teachers access to the resources students bring to bear in learning.

With students' voices at the center of learning activities, Reading Apprenticeship routines support risk taking and foster shifts in students' understandings of themselves as learners. Ongoing metacognitive conversation about text is simultaneously formative assessment, as teachers dynamically adjust instructional activities to support students' sensemaking. Nesting this work within routines that support students' sense of safety and value deepens the apprenticeship and the learning that it supports. Several rigorous studies of Reading Apprenticeship have shown positive impacts on teacher practice and student learning, and thus have paved the way for further expansion of the model through dissemination grants that enable Reading Apprenticeship PL to reach teachers in diverse geographical, policy, and demographic contexts across the nation (Fancsali et al., 2015; Goldman et al., 2019; Greenleaf et al., 2011; Sommers et al., 2010). Also see research on Reading Apprenticeship summarized in CASEL.org and EvidenceforESSA.org.[1]

Introducing Gayle Cribb

Gayle Cribb first encountered Reading Apprenticeship as a veteran teacher in 2001 when SLI offered PL at no cost through a state grant that supported outreach to low-income areas. She enacted Reading Apprenticeship in her classroom, saw positive changes in her students, and went on to participate in inquiry networks, lead schoolwide literacy reform, and facilitate Reading Apprenticeship PL in very diverse settings as part of Reading Apprenticeship's expert teacher consultant pool. She also participated in research first as a "subject" and later as a researcher and author. Gayle's learning and growth accumulated over time, enabling her to lead from the wisdom of her own practice and increasingly cultivate strong instructional practice more broadly by supporting other teachers to have similar learning and teacher leadership opportunities. Readers can see Gayle teaching and read some of her publications at *www.ReadingApprenticeship.org*.

[1] *https://pg.casel.org/reading-apprenticeship; www.evidenceforessa.org/programs/reading/reading-apprenticeship.*

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Effective PL and the Reading Apprenticeship Approach

Recent research syntheses have attempted to derive characteristics of PL that can meaningfully change teachers' instructional practices, students' opportunity to learn, and, importantly, students' achievement. For example, Desimone's influential work suggests that professional development is most effective when (1) it centers on content; (2) is aligned with the goals of school and districts in which teachers work; (3) engages teachers actively; (4) is collaborative; and (5) is of sufficient duration (Desimone & Stuckey, 2014). Research has demonstrated that engaging with academic content, pedagogy, and evidence of student learning can foster knowledge and pedagogical content knowledge development in ways that inform daily instruction (Darling-Hammond et al., 2009; Dillon et al., 2011; Gersten et al., 2010; Yoon et al., 2007). To this knowledge based on effective professional development, Kennedy adds the importance of inquiry as a mode of teacher learning (Kennedy, 2016).

Engaging Teachers Actively through Inquiry in Reading Apprenticeship PL

The characteristics of effective PL outlined in this research literature result from meta-analyses of a broad range of studies in varied circumstances and from addressing distinct PL topics and needs. The characteristics of effective PL derived from meta-analyses are, therefore, by definition, abstracted from practice. In laying out the ways Reading Apprenticeship embodies these effective characteristics, however, specifics matter. Reading Apprenticeship is focused on building the capacity of teachers across the subject areas and secondary and postsecondary grade levels to advance students' literacies, which will enable their engagement and success in subject-area learning. It is important, then, to detail what "engaging teachers actively" means with regard to this ambitious aim.

Just as the Reading Apprenticeship instructional framework guides teachers in designing and reflecting on the classroom learning environment, attending to personal, social, cognitive, and knowledge-building dimensions, PL is itself guided by the framework. Inquiry is the central mode of learning in the Reading Apprenticeship classroom; in parallel, active inquiry is central to Reading Apprenticeship PL for teachers. Facilitated enactments of text-based inquiry routines mediate the social and personal elements of teacher learning as teachers encounter, consider, and reject or embrace new ways of thinking about texts in the context of teaching their subject areas. Facilitated and supported discussion is as vital to the PL community as it is to the classroom community. In Reading Apprenticeship PL, this commitment to inquiry as a mode of learning for

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teachers and their students is embodied in the conversational routines and structures of the PL experience.

Reading Apprenticeship facilitators work from highly designed agendas and their own knowledge and classroom practice to engage teachers in inquiry routines designed to surface their literacy histories and identities as subject matter teachers. Carefully sequenced learning experiences have teachers begin Reading Apprenticeship PL by inquiring into their own content knowledge, reflecting on their reading and literacy habits and experiences in a variety of contexts, and recalling the impulses and interests that initially inspired them to become teachers of their particular disciplines. Reading process inquiries engage teachers in tackling complex texts as naïve readers and sharing what they did to make sense of these challenging pieces. Still other inquiries help teachers identify features of texts that offer learning opportunities and challenges, or zero in on their unarticulated knowledge about discipline-specific texts, purposes for reading, and reasoning processes that constitute expert practice.

To articulate these hidden processes of reading and reasoning, teachers may utilize specific strategy routines (e.g., clarifying, word learning, questioning) and then reflect not only on what they learned about expert reading processes, but also on the utility of particular pedagogical routines for supporting comprehension. Teachers then use these insights to design and facilitate similar inquiries in their classrooms. Gayle describes how this PL entered into her classroom instruction.

> Initially, I model (for students), articulating my own processes as a reader as I read aloud. My students and I begin looking at specific places in the text where we have problems understanding, where we have to slow down, where we are uncertain. We talk about what we might do to figure things out, we test various strategies, we talk about whether or not a particular strategy worked, and if so what we understand as a result. A lighter tone develops as reading becomes less of a mystery and more of a project that we work on together in class. (Cribb quoted in Schoenbach, Greenleaf, & Murphy, 2012, p. 89)

Reflecting the central importance of student voice in the Reading Apprenticeship model, multiple learning inquiries focus on making sense of student thinking. For example, after tackling inquiries into their own sensemaking with a text, teachers may view videos of Reading Apprenticeship classrooms in which students are engaged in text-based discussion about the same piece, or pour over student annotations on the text they read. They are supported to notice what students are doing to make sense of texts—are they drawing on personal knowledge and experience, looking up vocabulary, consulting other texts, talking with peers, tapping

genre knowledge, parsing sentences, drawing graphics? To what extent are their moves echoing what teachers themselves did in making sense of the same text? The inquiry focused on noticing what students are doing to make sense of texts helps teachers identify strengths and learning needs evident in what students say or write, to interrogate their own assumptions about students, and to practice interpreting student voices with deeper insight over time.

Through all of these inquiries, teachers experience metacognitive conversation, reading, and grouping routines that they are then encouraged to implement in their classrooms with students. This active and experiential dimension of PL—the apprenticeship based on Vygotsky's zone of proximal development (Vygotsky, 1978)—makes potential changes in instructional practice visible and nameable, and therefore more attainable and easier to sustain and build upon over time in the classroom. The Reading Apprenticeship model reflects the understanding that for practice to become truly responsive to student needs and to the varied contexts of teachers' work, teachers must be encouraged to be adaptive and generative in their use of specific practices (Ball & Cohen, 1999; Gillis, 2014; Kennedy, 2016).

The Content of Reading Apprenticeship PL: Fostering a Collaborative Literacy Learning Environment

Similarly, it is important to detail what "centering on content" means in the context of the ambitious goals of the Reading Apprenticeship instructional framework. Many programs of professional development will address specific instructional strategies. Others will focus on enriching teachers' understanding of their subject areas, such as science concepts, or disciplinary pedagogical approaches, such as using primary source documents in history teaching. While instructional strategies and subject area knowledge are important, our understanding of the "content area" for PL in literacy is rooted in long-term collaborative inquiry into the problem of secondary students' inexperience, discomfort, and difficulties making sense of complex, academic materials.

In our many investigations into students' literacy histories, experiences of shame and powerlessness are common and can be life-shaping incidents that influence students' future literacy engagement and the investments they are willing to make in learning. Elsewhere, we have described the pain students experience in school regarding reading and the many ways they compensate for perceived weaknesses (see Greenleaf et al., 2001; Greenleaf & Hinchman, 2009; Greenleaf & Valencia, 2017; Litman & Greenleaf, 2014).

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But such stories are equally true for teachers, regardless of how successful they may be as adult readers in particular circumstances. For example, in PL inquiries, teachers may relate how painful experiences with literary interpretation turned them off to reading literature. Yet they joyfully engage with nonfiction texts in their subject areas without realizing the deep reservoir of literacy knowledge they have developed with these texts, how that knowledge makes the sensemaking work feel easier, and what their deep engagement offers to less experienced readers. They may tell us how struggling to comprehend college texts in particular subjects shaped their choice of major and led to their teaching biology, say, instead of the career they had planned in medicine. They may describe standing outside the book mobile to request books by name, since as children in segregated communities, they weren't allowed to enter the community library. They may offer the ways that reading provided momentary escapes from bewildering and unsettling family or community circumstances and trauma. In Reading Apprenticeship PL, preparing teachers to support students in meaning making with text draws on these inquiries into teachers' own literacy lives, acknowledging how sensemaking implicates the whole self, all of one's experiences reading in community and school, across time.

Making sense of text similarly taps into the whole world of familiar and unfamiliar text types and textual practices common to academic and disciplinary work, for both students and teachers (Goldman et al., 2016). Teachers can be more effective when they are aware of the language experiences that shape the ways readers draw inferences and interpret text signals (Fang & Schleppegrell, 2010; Phillips Galloway et al., 2020; Skerrett, 2020), as well as the processes that readers engage in with texts while making meaning (Kintsch, 1998; Perfetti, 1999), including how readers recruit everyday interpretive practices from their social and cultural contexts to comprehend texts (Lee, 2020; Lee & Spratley, 2010). Making sense of text draws on everything that readers know and have experienced, as well as what they don't know and have difficulty imagining (Cervetti & Wright, 2019).

In Reading Apprenticeship, the content of PL thus includes more than a focus on reading strategies or text structures and features. Through collaborative inquiry, teachers are supported in learning how to create classroom environments in which the work of understanding complex text is a shared venture; in which already knowing is not as celebrated as coming to know (learning); in which disclosing difficulties understanding text supports problem solving for all rather than being labeled a weakness or liability; in which students' varied social and cultural experiences and knowledge count and are recognized as assets as they are put to use

in collaborative sensemaking (Schoenbach et al., 2012; Schoenbach & Greenleaf, 2009).

The Reading Apprenticeship PL approach is therefore shaped by theoretical frameworks and current research understandings from psychology and the learning sciences as well as from literacy research. To create collaborative learning environments, whether in PL or in the classroom, understanding learners' socioemotional learning needs is key. Educators' recent focus on the role of socioemotional dispositions and strategies in learning has drawn renewed attention to the long-studied roles that motivation and emotional responses have been shown to play in learning (Farrington et al., 2012; Yeager & Walton, 2011; CASEL.org). Recent research has underscored the importance of learning cognitive, metacognitive, and attentional self-regulation strategies (Afflerbach & Cho, 2009; Guthrie & Klauda, 2016); the centrality of social and cultural practices that influence and shape knowledge (National Academies of Sciences, Engineering, and Medicine, 2018); conceptions of self, agency, and learning that enable growth rather than rendering it seemingly futile; and the necessity of building stamina and perseverance in the face of challenge—when students may otherwise give up and give in (Duckworth et al., 2011; Dweck, 2006; Dweck & Molden, 2005; Duckworth, 2016; Duckworth & Quinn, 2009).

Creating an effective learning environment for teacher collaboration requires this same set of understandings, with added sensitivity to the specific needs of adult learners (Darling-Hammond et al., 2009, 2017; Desimone, 2009; Hill et al., 2013; Merriam & Bierema, 2014; Trotter, 2006). Just like their students, teachers must feel safe to ask questions, voice confusion and disagreements, and bring their own experiences to the collaborative learning environment. In describing therapeutic environments in which people are able to build resilience after experiencing trauma, Walsh (Walsh, 2002, 2007) enumerates characteristics that could apply equally well to the supportive classroom culture for literacy learning that is the focus of Reading Apprenticeship PL:

- "Normalizing struggle"—recasting challenges as shared, comprehensible, manageable, and meaningful to tackle
- Making implicit theories about learning explicit and open to revision
- Drawing out and affirming strengths; recognizing resourcefulness, persistence, and problem solving
- Prioritizing communication processes that clarify ambiguities and encourage expression and empathetic response
- Encouraging collaborative problem solving and mutual support to meet challenges

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The Duration of Reading Apprenticeship PL

There have been many iterations of Reading Apprenticeship PL over the years to accommodate the varied needs of teachers working in diverse school and district contexts. In each iteration, these core elements—inquiry enactment as a way of learning, tackling complex texts, literacy engagement and sensemaking processes, and developing a socioemotionally informed learning environment—remain constant. Advocating that PL be "of sufficient duration" in response to the one-shot workshop approach typical of teacher learning offerings, Reading Apprenticeship takes place in multiple in-person and online experiences over time (Darling-Hammond et al., 2017). Recognizing that teacher learning is a complex and interactive process, learning institutes and PL communities (PLCs) punctuate the school year so that teachers (as learners) have access to the necessary resources (tools, time, and people) to experience new ways of thinking about their own practice. Regularly spaced learning across the school year offers teachers opportunities to reflect individually and collaboratively on practice, to enact new practices in their own classrooms, to discuss and reflect on associated successes and challenges, and to plan next steps for continuing the cycle of learning and deepening practice.

When educators are given the opportunity to work in a group or team over extended periods of time, transformation in teacher practices occurs. As it did for Gayle when she was in the classroom, so it did when she apprenticed history teacher Crystal Maglio, who eventually became a design research partner. Crystal gives voice to the hard work and identity shifts that take place—for both teachers and students—when engaged in deep learning with complex texts. In a 2016 reflection, which became part of an open resource history unit she and Gayle designed, Crystal articulated how insights she gained in PL inquiries led to shifts in her practices that were new but initially uncomfortable to enact in the classroom.

> When I look back at video clips [of my own teaching] . . . I can see how hard I am working to hold back from validating students' interpretations and, instead, am trying to push the meaning-making back to the students. This was a huge struggle for me internally, and I got a lot of push back from the students, which made it even harder. At one point—in a moment I like to think of as "the mutiny"—one student raised his hand to protest the "new way" of doing things. He accused me of leaving them hanging by not explaining the texts. I tried to communicate that I wanted to give them the power to decide what the texts meant for themselves. And, part of me still felt like I was guilty as charged; I wasn't "helping"—at least not in the old way. And I didn't yet understand the new way enough to have confidence in

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> it. However, with Gayle's support and encouragement, I persisted. (Maglio, 2016, "Crystal's Reflection," p. 4)

Key Principles of the Reading Apprenticeship Approach

On the one hand, PL can be described as a curriculum or set of lesson plans, complete with material resources to support teacher learning. Reading Apprenticeship institutes, courses, books, videos, and other materials (tools) can be seen in that light. On the other hand, PL can be understood as a profession-long enterprise of ever deepening expertise. This understanding of, and commitment to support, ongoing teacher and student literacy growth is at the heart of the work done to build Reading Apprenticeship over nearly three decades.

Beyond the characteristics and theoretical influences described above, then, Reading Apprenticeship is founded on a set of principles that have shaped its growth and impact: a commitment to equity; collaborative design; asset orientation; teachers' passion for their subject area; and a positive socioemotional learning climate. These principles are fundamental to the work and success of the project, yet commitments such as these are not often discussed in the evidence base, nor are they listed as characteristics of high-quality PL. We share them here because they create the fertile ground for the project's continuous growth and innovation. We illustrate these principles and their impact through Gayle's growing contributions to her students, fellow teachers, and the field.

Equity

Access to high-quality learning for both teachers and their students has driven the development of Reading Apprenticeship PL, tools, and materials since 1995. Through grants from philanthropic and government agencies focused on enhancing opportunities for students who are most often underrepresented in higher education, our aim has been to guide teachers and staff to support "engaged, advanced literacy for all." In conjunction with this commitment is a focus on high-quality PL for all teachers. Equity and access are not separate concepts or activities we "do" but instead are baked into each principle articulated below and at each level of our work—from the framework itself, to how we design teacher PL and research, to how we allocate resources and function as an organization.

In the classroom, Reading Apprenticeship promotes a view of students as *inexperienced with*, rather than *incapable of*, tackling the challenges of discipline-specific literacy. We view all students as capable of

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reading and learning from complex texts. Regardless of their past school experience and performance and student identity, in Reading Apprenticeship classrooms, everyone can "play," and there are multiple entry points and levels to meet each student's needs. Students are consistently invited into collaboration and are supported to participate in the enterprise of making sense of text and creating new knowledge.

Reading Apprenticeship routines help teachers support students to understand the "how" of learning—that asking questions, being aware of when you are confused, and seeking support from teachers and peers who have different backgrounds, interpretations, and experiences are all part of school and life. Teachers also inquire into students' interests, experiences, and cultures, designing lessons that draw on those interests, build on those strengths, and track their change over time. Students' voices and perspectives are thus the center of classroom instruction, which takes the form of extended meaning making about texts and content. As students build their capacity for learning, self-awareness, and sensemaking, teachers introduce increasingly complex texts and disciplinary ways of reading.

Gayle recalls coming into teaching with a clear sense of mission that resonated with Reading Apprenticeship.

> "I came into teaching with a clear commitment to equity. As a college student, I learned Spanish as part of that, trained as a bilingual teacher, and chose a district with socioeconomic and ethnic diversity. I was also committed to history. I wanted all my students to have access to the discipline I had come to value. I wanted them to understand the epistemology of history, to seek out and know how to grapple with multiple perspectives, to think historically, and to be able to reason and think critically. I wanted them to have these powerful tools for understanding their present through an inquiry into the past. Before encountering Reading Apprenticeship, I had worked hard at engaging my students in this endeavor and was successful to some degree, but few students could handle many of the texts, so I became better at delivering the content without so much text in an effort to give all of my students access. With Reading Apprenticeship, my students learned to engage with complex texts, and the rigor I had always believed was possible began to emerge."

In PL, Reading Apprenticeship facilitators likewise reach for the engagement of each and every teacher in a course, regardless of their past experience and performance and teacher identity. Mirroring what we do with students in a classroom, we attempt to take every teacher where they are, and work with them to expand their insights and repertoire. Because

of our organizational commitment to equity, we intentionally offer PL to teachers in diverse and under-resourced settings, especially seeking out teachers who may have had few opportunities due to their location or their school system's resources. We seek large grant work for evidence-based projects, especially those that include scale and reach—often choosing to work with thousands of educators across multiple regions and contexts when we could limit work to a single district.

For example, one recent initiative involved work with seven states and included teachers of low-wealth students in both urban San Francisco Unified and rural Fresno County. In another initiative, we engaged teachers and leaders from Chicago Public Schools and a small, off-road remote school in Alaska. In yet another, we worked with teachers in New York City and in Arizona's native reservations. Solving the challenge of maintaining high quality and impact and living the principles articulated below, while working at scale, is indeed part of making evidence-based PL more accessible to ever more educators. In each setting, we find teachers eager for intellectually challenging work and ready to collaborate with colleagues to improve student learning experiences and outcomes.

Collaborative Design

Recognizing the challenges that teachers face in helping a wide range of students engage in rigorous academic reading to learn subject matter, Reading Apprenticeship classroom routines have always been designed in collaboration with teachers with the goal of identifying and sharing effective ways to advance students' literacy engagement and achievement. The model is one of *distributed expertise,* relying on teachers and their students to tap the resources they bring to the learning environment. Reading Apprenticeship research and PL staff engage experienced Reading Apprenticeship teachers in *Inquiry Networks* explicitly devoted to building new tools and approaches through joint inquiry into specific literacy phenomena. We work with teacher colleagues to develop tools and practices for teacher and student learning, designing and redesigning for specific, intended outcomes (such as drawing students' affective responses into the work of learning, and engaging students to notice and share their confusions, to learn to generate specifically scientific or historical questions of texts, to do intertextual referencing, and to develop disciplinary argumentation from multiple sources).

Collaborative design may involve teachers as partners in design-based research projects or in the design of instructional routines, PL, curriculum, or their own research. Teachers collect evidence from students to gauge the promise and potential of new instructional routines. Successful

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routines for teacher and student learning emerge from this iterative design process, enabling teachers new to Reading Apprenticeship to benefit from the work of predecessors. Over time, Gayle participated in all of these endeavors. Although not every teacher participates at the level experienced by Gayle, many do.

> "When we were working on Project READI, we had a Teacher Inquiry Network with a focus on disciplinary argumentation. I facilitated the history group. We wanted to become aware of how we read as we develop historical arguments. The professional development team designed an inquiry to capture our processes as we read historical texts under two different circumstances. For one set of primary sources, we provided a claim and asked teachers to read the texts in order to support the given claim. For the second set of primary sources, we asked teachers to read the texts and create claims. Then we had a metacognitive conversation in which we described the specific moves we had made as readers in each circumstance. We were surprised to discover how very different our processes were! That "ah ha" then affected how Crystal and I designed the unit for our research (Cribb, Greenleaf, & Maglio, 2018) and, because it had big implications for what students learn how to do with historical texts, we incorporated a similar inquiry into one of our history argumentation modules for PL."

Asset Orientation

Teachers and students bring unique assets into the classroom learning community in the form of language, knowledge, life experiences, and interests. Reading Apprenticeship recognizes these as key resources to draw upon as learners focus on sensemaking with complex texts in various subject areas. The Reading Apprenticeship PL model immerses teachers in experiential learning through literacy inquiry with complex texts, practices that they are supported to integrate into their subject-area teaching. As teachers become reacquainted with their academic and discipline-specific literacy expertise through collaborative inquiries into their own and their colleagues' reading, they are increasingly able to reimagine what they and their own students can accomplish. Importantly, explorations of classroom videos and student work support teachers in building insight into student meaning making. The approach is therefore dynamic and responsive; it is rooted in the act of teaching and learning with text. This requires reframing learning equally in the classroom and in the PLC as a *partnership of expertise*.

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As a novice Reading Apprenticeship teacher in 2004, Gayle reflected on how experiencing one metacognitive learning routine, "Thinking Aloud," and then later facilitating it with colleagues and her own students, brought about shifts in her understanding of both reading and her students.

> I now think that reading is thinking—that it is in the interaction between the author and the reader that the meaning is constructed. It matters what the reader brings to the reading in terms of experience and prior knowledge, as well as what the reader expects to get from the reading and his or her own processes for doing so . . .
>
> I find that I am more curious than I used to be about what exactly my students are thinking when they are reading. I listen more closely for how they are trying to make sense of the piece and ask them more questions about their process. I am less urgent about identifying and providing that missing piece of information or logic. I am more expectant about learning something about my students or the text or life from their particular reading of the text. . . . I can't help but think that my students feel this shift toward peerness, however subtle, and respond in kind. (Cribb quoted in Strickland & Kamil, 2004, pp. 240–241)

Socioemotional Learning Climate

Embarking on new teaching approaches unavoidably requires risk-taking. Teachers and the work they do are embedded in systems that make demands on their time and constrain their decision making to varying degrees. Reform mandates shift, often without consideration of valuable ongoing work. Well-meaning administrators pepper the faculty with multiple, often simultaneous and sometimes contradictory, reform initiatives, often without regard to how they can be addressed and integrated into the central work of teaching. There is little time in the teaching day to think, consolidate learning, and imagine new ways to engage learners.

Students and communities are impacted by trauma—from natural disasters, to bullying and gun violence, to pandemics and their accompanying disruptions and distress. Reading Apprenticeship facilitators work from an understanding of the important social and emotional dimensions of learning, as they work with teachers who are often overwhelmed and frazzled, want to do well by their students, yet experience little autonomy or recognition. Just as in the Reading Apprenticeship classroom, PL depends on building a climate of trust and care in order to build teachers' hope, resilience, and agency to embrace new ideas and build the courage to enact new approaches to teaching. As Gayle notes,

> "One of the things I needed to learn as I transitioned from teaching students in the classroom to facilitating professional learning was how much I was asking of teachers. Though I had been in the trenches myself, my own learning curve had happened over the course of a decade. I had forgotten how tightly we hold to what we have figured out in the classroom, to our teacher identities, our beliefs, and our practices. I needed to attend to the emotional work entailed in teachers considering significant pedagogical shifts.

Passion for Learning

Underlying the notion of distributed expertise in Reading Apprenticeship PL is a deeply held set of assumptions: Teachers, especially those at the secondary level, have expertise in a subject matter and, at some point, they loved history, art, math, physics, or literature; however, when teachers are discouraged, working in dysfunctional settings, overworked, and pressed by everyday crises, their passion and idealism can get buried. One of the outgrowths of text-based inquiry routines in Reading Apprenticeship is the engagement in deep subject matter learning that occurs while reading something complex. These inquiries often reawaken the passion that brought teachers to their disciplines in the first place. In the classroom, these same routines support students' deep engagement in thinking and talking—especially when coupled with interesting texts—sparking students' innate curiosities and often leading them to new discoveries. Not much is more compelling than the light in students' eyes when they step into the joy of curiosity. Reading Apprenticeship PL draws these key moments of student engagement in learning into view through video inquiries, formative assessment, and ongoing teacher reflection.

Gayle captures this kind of reengagement in her passion for history in a recent reflection on her choice to engage in an inquiry group focused on her subject area.

> "When SLI formed a History Teacher Inquiry Group to develop disciplinary literacy knowledge and tools specific to history, I volunteered. I opted into these opportunities because I enjoyed the intellectual stimulation, the learning, the collaboration, and how what I learned fed my classroom practices. We were gaining nuance in understanding how we read as people interested in history, with historical questions. Those insights were useful in resisting the pressures of convention and making room for something different from the way history and social studies were typically taught at the secondary level. We were homing in on what I had loved as an undergraduate student of history."

Structuring for Equitable Access and Sustained Support

PL as Ongoing Research and Development

Developing and supporting learners' growth in text-based inquiry is demanding, both for teachers in the classroom and for facilitators in the PL setting. Mediating such learning requires one to assess the learning situation, to read the resources in the group, to make decisions about how to challenge and support particular learners—in particular disciplines, and at particular moments in the learning journey. Reading Apprenticeship PL routines are meant to guide and support teachers in practicing and refining this very complex decision making. Through metacognitive conversational routines, ongoing formative assessment is built into PL and classroom engagements. Because Reading Apprenticeship facilitators are drawn from diverse settings and subject areas and are themselves expert Reading Apprenticeship teachers, they are able to *lead from practice* in PL.

To ensure the PL routines are supporting particular groups of learners, research and professional development design staff engage in what is essentially an ongoing project of iterative, formative design research at multiple levels—analyzing and reflecting on interactions with facilitators, teachers, and students in order to create and refine enabling conditions for learning. Similarly, as mediators of teacher learning, Reading Apprenticeship facilitators continually reflect on what they need to do next to support deeper learning with particular groups of teachers—be their shared focus a content area, grade level, or course-type—and respond to the continually changing context, as society and the field of education change over time. Ongoing research and development processes can themselves present opportunities for teacher PL and validation, as Gayle describes.

> "To my good fortune, my classroom was selected for observation and data collection as part of a Reading Apprenticeship R&D project. I was partnered with a brilliant researcher, Cindy Litman, who asked amazing questions, shared observations, listened to me work out my thinking, and collaborated on lesson design. Later, some of those lessons were filmed for use in professional learning and some of the data has made its way into various publications. As classroom teachers, much of the time we work in isolation. Much of what we do is invisible, even to our students. So, having another educator in my classroom, thinking with me about my work, was rich and enormously validating. For many of us, the creativity, care and intelligence we pour into our lessons never moves beyond our classroom walls. There

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> are few mechanisms that allow that good work to be shared, so to be able to make a contribution to the field was a gift."

From the outset, SLI's leadership identified the need for this work and carried out studies to provide evidence of its effectiveness, enabling the project to continue securing funding for the kind of work Gayle and so many others experienced. The project intentionally invested funding resources in researcher/practitioner partnerships to iteratively design, test, and refine teacher-informed tools to be broadly disseminated. This research agenda was grounded in an ongoing commitment to gauge success by examining impact on teacher practice, on students' opportunities to learn, on students' literacy learning outcomes, and on informing the discourse of the field. This ongoing focus led to greater opportunities to disseminate Reading Apprenticeship, replicate prior research, as well as conduct new studies to deepen the knowledge base of the field. Gayle's continued professional growth was supported by these new opportunities.

> "In 2010, SLI won federal grants for two big projects which included teacher leadership and teacher-researcher partnerships. I was invited to take on new roles, as I left the classroom and became both part of a PL design team and a research team. Both roles were challenging—designing for teachers, rather than students, and participating in what was a new field for me, the academic world of literacy research. Key to being able to step into those roles successfully were SLI's valuing of my expertise as a classroom teacher, insistence that my voice be heard, and support for the learning I needed to do."

Communities of Learners

Fostering a learning environment that provides access to and builds on the resources already present in learners, including teachers, through metacognitive conversation requires the development of robust learning communities. One way the principle of *leading from practice* informs Reading Apprenticeship PL design is that we seek to start working with teachers who opt in from a school site, rather than working with entire faculties who are mandated to attend. This is particularly important when focused on discipline-specific literacy instruction, since many subject area teachers regard literacy as being outside of their purview.

Starting with a subset of teachers who choose to participate in PL also enables the more intrepid explorers on a school staff to try out core Reading Apprenticeship routines in their subject areas and to begin leading from their own practice, thereby developing evidence of successful implementation and student engagement for their less eager colleagues

and beginning their own journeys as *teacher leaders*. To seed the growth of site-based communities of practice, teachers are invited to participate in multi-site Reading Apprenticeship PL institutes and courses with colleagues, as *subject-based and/or cross-subject area teams*. Site-based teams are connected across schools in PL *networks*, enabling fertile ideas and solutions to implementation dilemmas to travel from site to site.

Over time, additional *cohorts* of teachers from school sites participate in Reading Apprenticeship. Teacher leaders at the school site are often key in encouraging their colleagues to participate. Through resources and materials as well as focused PL opportunities, Reading Apprenticeship supports site-based PLCs to grow in order to sustain and deepen their work to advance student literacy learning.

Additionally, Reading Apprenticeship facilitators engage in a community of practice led by the organization, providing collegial support for ongoing learning, as well as an improvement and innovation resource for high-quality dissemination. SLI's capacity to consistently implement PL at a national scale, while also remaining responsive to local conditions, is dependent upon this community. Gayle believes that Reading Apprenticeship facilitators remain engaged because they value one another and have a shared commitment to teaching, PL, and continuous improvement.

> "As a facilitator community, we appreciate opportunities to collaborate with one another. Facilitating this complex professional learning is challenging. The local contexts are each unique, and the field of education is constantly changing as new knowledge, initiatives, reforms, and politics develop. We strive for flexible fidelity—understanding Reading Apprenticeship and the design of the professional learning deeply enough that we can respond to the needs of particular groups of educators. Because the knowledge base of Reading Apprenticeship continues to build, our professional learning offerings continue to evolve. We love getting a chance to try out a new inquiry; recalibrate by tackling a new text together; work through a new facilitation agenda; or share perceptions, insights, and questions about a particular context or a new development in our contexts (e.g., online learning; digital texts; wearing masks due to pandemics). We treasure the expertise in the room and value learning from one another."

Multiple Entry Points and Sustained Support

As described above, from the outset of this work SLI has engaged teachers as way-makers, explorers who can chart a new course and lay out stepping stones for others. Creating access to high-quality, continuous PL is central to improvement and equity for both teachers and students. Rather than

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minimize the demand PL can place on burdened school sites and teachers, we opt to create access via multiple entry points and levels of investment, from instantly accessible digital resources on the web to comprehensive multi-year, district and statewide literacy initiatives.

To meet the needs of diverse districts and individuals, Reading Apprenticeship includes PL engagements of varied lengths (in-person, online, and hybrid options), and we publish affordable, practical books with tools so that any educator can take up this work with their students and have models for expanding the work to a department, school, or districtwide initiative. Reading Apprenticeship online PL gives educators more scheduling options, expands accessibility for rural educators, and increases all educators' interactions with experts and colleagues over the school year without the expense of travel. We have intentionally designed online learning to include the extended synchronous inquiries, discussion, and interaction that embody our commitment to supporting teachers socially and personally as they engage in new forms of practice (Archer et al., 2018; Katz et al., 2019).

To create PL experiences that are responsive to local contexts while building capacity to sustain inquiry and continuous learning, we work with the many layers of leadership that sustain PL over time—support agencies, teacher leaders, and administrators. These local partners often hold long-term expertise and knowledge about education policies and PL in their area and can inform the project of ways to integrate local reform initiatives with Reading Apprenticeship. We design and convene networks, as well as instructional leadership teams, building the pipeline of access through additional training for Teacher Leaders and administrators. These layers of support enable schools to provide principled, ongoing assistance for teachers at their sites and extend the impact and ongoing refinement of Reading Apprentice immeasurably, as Gayle's own PL journey attests.

> "When I look back at my history in Reading Apprenticeship, I appreciate the opportunities I was afforded, over time. This was not a "one and done" training. In fact, our administrators signed an agreement that we would not be expected to present something to our colleagues when we finished the first three days, but would be given that year to implement and to continue learning. The implication was that this was not a small project, or a simple practice. We were encouraged to try things and to bring back our successes and challenges to the Reading Apprenticeship network. Opportunities for continuing to learn emerged in subsequent years, as SLI won new grants, and my district was able to allocate resources to allow us to continue deepening our understanding. Our student teachers learned the approach

from us because that was just "how things rolled" in our classrooms. In periods when we did not have access to further PL, we had the book and we had protocols for inquiries and assessments that we could use in house to keep moving forward.

"As a facilitator, I was initially skeptical that Reading Apprenticeship could be learned in an asynchronous online format. After having taught many of those courses, I can attest that, if people do the work, they can make tremendous progress in understanding Reading Apprenticeship and transform their practices. I have met teachers who read the book and say it changed how they taught, and teachers who got some exposure from a teacher-led inquiry at school and now sought in-person PL. From an equity lens, I am so pleased that there are multiple ways to begin, and multiple ways to continue to learn."

The books Gayle refers to—*Reading for Understanding: How Reading Apprenticeship Improves Disciplinary Learning in Secondary and College Classrooms* and *Leading for Literacy: A Reading Apprenticeship Approach*—enable individual teachers and teams at school sites to walk well-marked and principled pathways on their own, through book study groups (Schoenbach et al., 2012, 2017). Likewise, the website *www.ReadingApprenticeship.org* offers classroom videos to share what Reading Apprenticeship looks like across secondary and college levels and in different subject areas. Lesson resources, curriculum units that model and support text-based inquiry, teacher team tools, research reports and tools are also available on the website at no cost. These portable tools offer additional points of access, seeding the field and distributing expertise across time by designing and mediating teachers' experiences as they continue to deepen their practice with Reading Apprenticeship teaching and learning. Over time, teachers expand their pedagogical content knowledge and expertise as well as their confidence as strategic designers of learning opportunities for their students.

Conclusions

In this chapter, we have described long-term investments we have intentionally made as a collaborative R&D project to foster ongoing literacy growth among teachers and students across subject areas and grade levels. Our work has proceeded by acknowledging and tapping into distributed expertise and teacher ownership to build the capacity and generativity of teachers and education leaders. When defining PL as a single experience or series of institutes or workshops, measuring the value added from such

inputs in terms of teacher change or student outcomes is necessarily limited in scope and, often, in magnitude. Yet a far different view of *impact* emerges when viewing a larger program of capacity building and investment in teacher leadership over time. When there are central organizing projects like the Strategic Literacy Initiative that can invest in and support work over time, professional expertise can be continuous. As Gayle's professional growth and the reach of her impact on the field illustrates, the value added of such work defies easy quantification.

By holding true to a vision of deep literacy learning as the means through which teachers and their students can continuously improve, we have created tools and learning opportunities and resources that have reached over 10,000 teachers and more than 1,500,000 students. And while multiple rigorous randomized controlled trials have measured and certified the efficacy of the Reading Apprenticeship PL model in its impact on teacher practice, as well as student literacy and subject matter learning (Greenleaf et al., 2011; Goldman et al., 2019), such measures, as Gayle's professional journey attests, reveal only a small part of the long-term, sustained impact of this work. And while Gayle Cribb is a remarkable professional, she is one of the hundreds of Reading Apprenticeship leaders and facilitators working to transform the literacy learning opportunities of middle and high school students across the nation. We intend her story to be illustrative, emblematic of the reach each teacher can have when equipped with the knowledge, tools, agency, support, and generativity that a program of deep inquiry-based learning such as Reading Apprenticeship can offer. Each Reading Apprenticeship facilitator and experienced teacher leader could offer a similarly unique story of sustained professional growth and impact.

Likewise, the work we have described in this chapter is replicable. We have attempted to lay out the key principles and core values, the investments and ongoing iterative development that can build and magnify outcomes over time. This work can be taken up by others with different goals and focus areas for teacher and student growth. Universities, regional education support centers, and school districts can support ongoing and collaborative R&D to tackle long-term problems of practice (Coburn & Penuel, 2016). In such work, sustained PL with ongoing support for teacher growth is a necessary component. All too often, schools and systems invest in publisher-based and short-term workshops that show little impact on teacher practice or student learning.

The longer-term investment is difficult to ensure, given constraints of budget and time; yet this is where a central R&D role can be key to building and sustaining teacher leadership and capacity. Scholars, groups of scholars within universities or organizations like WestEd, education agencies, and school districts can support work over time through

intentional fund raising for educator/researcher partners with a long-term and sustained focus. Enlightened school and district leaders can shift a focus on short-term solutions to an investment in longer-term growth and teacher leadership. External funding organizations can assist in holding the vision and focus on capacity building through the tumult and change that often surround schools and teachers. Such support can take the field of PL beyond narrow understandings of effectiveness and impact to embrace a long view of teacher learning.

At the end of the day, transformation is not brought about by teaching specific routines or telling people what to do; transformation occurs when we go deep into what it means to teach and learn. In the work of Reading Apprenticeship, we have designed for scale and have intentionally made iterations on the model over time, always in partnership with teachers. Ours is a story about what ongoing collaborative R&D, through funding and consistent focus, has enabled us and so many educators to do by engaging teachers as essential leaders and owners of this work so that it can spread, grow, develop, and ultimately transform the field.

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