

The Strategic Literacy Initiative, WestEd

**READING APPRENTICESHIP ACROSS THE DISCIPLINES:
Effective Secondary Teaching and Learning through Literacy Leadership**

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I. INTRODUCTION

The aim of the proposed Reading Apprenticeship Across the Disciplines (RAAD) project is to increase the effectiveness of secondary instruction and the number of highly effective secondary teachers and thereby improve secondary students' learning dispositions, metacognitive skills, academic literacy proficiencies and academic achievement. To achieve this, WestEd's Strategic Literacy Initiative (SLI) will provide cross-disciplinary professional learning and support to implement effective literacy instructional practices to 2,000 middle and high school teachers of English language arts, science, social studies, and other academic disciplines. To build local capacity and sustainability, we will collaborate with four established local partners who serve schools with high needs student populations and support comprehensive reform to improve teaching and learning. With these partners, we will carry out the work in two large high-needs urban districts, Chicago and New York City, and in district consortia in Texas and Michigan. Each of the local partners will work closely with SLI to provide ongoing support for academic literacy implementation and build the capacity of teacher leaders and school administrators to sustain and disseminate literacy practices as a part of strong schoolwide learning cultures. We anticipate the impact of these activities will extend the reach of the project to 4500 secondary teachers of academic subject areas (an additional 2500 teachers).

An experimental study designed to meet WWC Evidence Standards will examine the growth and effectiveness of teachers served by the project using multiple measures - including local measures of teacher evaluation such as the Human Capital Management System in Texas (<http://www.txcee.org>). The study will also evaluate impact of the professional development on students' academic dispositions, reading comprehension and achievement.

The proposed project will add knowledge to the field on the pressing question of how to

increase cost-effectiveness and sustainability of high quality professional development. It will also inform the field in terms of further insight into issues, challenges, and successful strategies for practitioner collaboration with research and development experts to support and sustain comprehensive system change to improve teaching and learning.

Three key goals shape the proposed project, each aligned with one or more of the Absolute or Competitive priorities of SEED (as described in the NIA).

Goal 1: Increase the number of highly effective secondary teachers serving high needs students by providing Reading Apprenticeship professional learning; approximately 20% of these will be STEM teachers. *Absolute Priority 3; Competitive Preference 2; Competitive Preference 3; Competitive Preference 4*

Goal 2: Improve high needs students' reading comprehension, academic achievement, metacognitive skills and positive learning dispositions by increasing opportunities to learn. *Absolute Priority 1; Competitive Preference 1; Competitive Preference 4*

Goal 3: Build local capacity for strong and sustained implementation and dissemination of effective academic literacy practices through teacher leader development, school and regional network support. *Absolute Priority 3; Competitive Preference 2*

Applicant's Qualification for Absolute Priority 1 and Competitive Preference 1 (strong evidence of effectiveness)

In accordance with the notice of application for this SEED competition and the What Works Clearinghouse definitions for effectiveness, the proposed project meets Absolute Priority 1 as well as Competitive Preference 1. We have strong evidence that Reading Apprenticeship (RA) strengthens literacy instruction and improves student achievement in both literacy and content area skills and knowledge, based on WWC standards. According to the WWC, Kemple, et al. (2008) and Somers, et al. (2010) conducted a large-sample, multi-site (district) randomized controlled trial that met WWC standards without reservation (WWC, 2009; 2010).

The proposed project is designed to provide teacher professional development to support literacy instruction in academic subjects, in districts serving middle and high school populations of high needs students who perform below grade level in state standardized tests of reading

comprehension. There is an extensive body of evidence that RA is an effective intervention for similar students under similar conditions. (See Appendix E.1 for further detail on effectiveness).

II. SIGNIFICANCE

A. National Significance

The Need to Improve Students' Academic Literacy Proficiencies

The new, higher college and career standards call for students to demonstrate advanced literacy proficiency not only in English classes but also in academic subjects such as science and history (NCCSSO & NGA, 2010; TEA, 2015). In all four of our partner sites, high standards are increasingly driving the development of state-level policy on curriculum and evaluation of teacher effectiveness. All students must be prepared to meet these more rigorous academic standards necessary to succeed in college and career, including students with high needs such as English learners, low-income students, minority populations that experience persistent achievement gaps, students in rural settings, and students at risk of not graduating from high school. However, to meet this goal, the U.S. educational system must overcome the academic literacy crisis plaguing our nation's secondary schools (College Board, 2012; NCES, 2012).

Nationally, too few secondary school students are able to read and comprehend complex academic materials, think critically about texts, synthesize information from multiple sources, or communicate clearly what they have learned (NAEP, 2006; 2007; 2009; Snipes & Horwitz, 2008). According to national assessments, only 3% of U.S. 8th and 12th graders read at an advanced level, while fully two-thirds of our adolescents score below proficient in reading (NAEP, 2006; 2007; 2009). Many high-needs students have been demoralized by years of academic failure and do not see themselves as readers or capable learners (Dweck, 2002). In these measures of literacy, achievement gaps are stubbornly persistent along racial/ethnic and socioeconomic lines (Jencks & Phillips, 1998; NAEP, 2007).

Without a substantial change in their academic literacy, U.S. middle and high school students face continued academic problems in high school and college because they are unable to handle the quantity and complexity of assigned reading and writing (ACT, 2005; 2006; 2007; College Board, 2012). Students who do not perform well in 8th grade are unlikely to do well in high school (Balfanz, Herzog, & MacIver, 2007; Neild & Balfanz, 2006). Then, if they fall off track during freshman year, their odds of earning a high school diploma are very low (Allensworth & Easton, 2005; Neild & Balfanz, 2006; Roderick & Camburn, 1999). One of the most commonly cited reasons for high school students' dropping out is that they do not have the literacy skills to keep up with the curriculum (Kamil, 2003; Snow & Biancarosa, 2003). These students are likely to struggle in the workforce as well; even for entry-level jobs, the ability to read, write, and think critically is increasingly a minimum requirement (ADP, 2004; Business Roundtable, 2009; NCEE, 2006). Literacy mediates students' access to the full range of subject matter, and low levels of adolescent literacy have contributed to the broader academic performance crisis among U.S. high school students (Barton, 2003).

Further, as students move up the grade levels, they encounter increasingly complex forms of texts, and the writing and reading skills required to succeed in academic subjects increase significantly (Snow, 2002). In English language arts, students encounter increasingly sophisticated literary forms, language structures, and themes they are expected to illuminate through analytical essays. In history/social studies, students need to interpret the language of primary sources, however arcane and unfamiliar, for point of view and purpose, and use often conflicting accounts in explanations of historical places, times, and events. In science, students need to be able to gain knowledge from elaborate diagrams and data that convey information and illustrate scientific concepts, as well as attend to precision and detail in order to evaluate

scientific claims. Likewise, writing and presenting information orally are key means for students to assert and defend claims in science, demonstrate what they know about a concept, and convey what they have experienced, imagined, thought, and learned (Heller & Greenleaf, 2007). Yet despite the recognized and widespread need for adolescent literacy development in the upper grade levels, very few schools and districts provide the needed academic literacy instruction, particularly in the subject areas where it is most critically absent (CCAAL, 2010).

The Need to Improve Secondary Teachers' Skill and Will to Support Students' Improved Academic Literacy

To build the advanced literacy skills that high school subjects demand, then, subject area teachers must help students to develop the capacity to draw inferences from academic texts, synthesize information from various sources, follow complex ideas, and write from textual evidence in their disciplines (Heller & Greenleaf, 2007; Lee & Spratley, 2010; CCAAL, 2010). In large part however, middle and high school teachers are unprepared to meet this challenge, not knowing how to simultaneously build students' academic literacy skills and engage them in a rigorous curriculum of subject area study (Greenleaf & Schoenbach, 2004; Shanahan & Shanahan, 2008). Instead, teachers typically reduce their expectations if students struggle with literacy, and this "literacy ceiling" becomes students' *de facto* achievement ceiling, undermining their academic futures and life chances. But to meet the high standards of the CCSS and NGSS, subject area teachers must develop both the skill and the will to take up this challenge, requiring a paradigm shift in their beliefs and instructional practices.

Secondary teachers, focused on conveying content and concerned with "coverage," often approach this challenge with preconceptions and practices that make it hard for them to believe that changes are possible. Since they see that students have difficulty with reading and writing tasks, they skirt these tasks in an understandable but misguided effort to "give" students

knowledge. The classroom structures and interactions most common in the nation's secondary schools often value "doing the lesson" over substantive learning, undermining the development of academic mindsets and task engagement critical for achieving high levels of literacy proficiency (Bloome, et al., 1989; Duschl, Schweingruber, & Shouse, 2007; Hall, 2010; Jiménez-Alexandre, Rodríguez, & Duschl, 2000; Rex, 2001; Weiss, et al., 2003). This is especially true in classrooms where students are already behind, where instruction is characterized by highly prescriptive pacing guides and tasks of limited challenge (Gutiérrez, 2008; Gutiérrez, Baquedana-López, & Asato, 2000; Iannacci, 2006; Pransky & Bailey, 2002/2003). These practices reinforce an internal passivity, limiting students' understanding and learning and undermining the development of academic engagement and literacy skills.

To make headway on this problem, teachers need a vision of a workable solution as well as a new instructional repertoire that offers active learning for students, content integration, and skill building in essential reading and learning skills. Yet without access to in-depth professional development that builds on their content concerns and disciplinary expertise, teachers have limited routes for increasing their skill and will in this area. Similarly, without sustained school-based support for implementing and continually improving successful literacy instruction in disciplinary classes, teachers have a hard time imagining what success would look like, or why it would be worth their efforts to embed literacy as a way for their students to gain increased understanding of their content area. To build new instructional repertoires, secondary subject area teachers need professional development opportunities to build knowledge about literacy and its role in their disciplines, to see others using instructional strategies in their subject areas, and to rehearse new teaching practices. They need sustained support to re-imagine and transform their teaching, to try out discipline-specific literacy instruction, to assess its utility as a practical

and powerful tool for *their* students working with *their* curricula, and to solve problems of practice with their colleagues in professional learning communities at their sites.

Reading Apprenticeship Addresses Student and Teacher Needs

Based on these needs, the Reading Apprenticeship (RA) instructional framework and professional development model was developed to draw on teachers' disciplinary knowledge and commitments and effectively transform instructional approaches, through ongoing design-based research involving multiple cohorts of subject area teachers (Greenleaf, et al., 2011a, b; Greenleaf & Schoenbach, 2004). The framework builds students' academic identities and dispositions for grappling with complex texts while simultaneously supporting their literacy growth and subject area learning (Schoenbach, Greenleaf & Murphy, 2012).

B. Potential Contribution to Development of Theory, Knowledge, and Practices in the Field

As teachers are required to be more responsive and targeted in their instruction in order to improve – and have their effectiveness be measured by - student achievement, the need for smart, adaptable, proven support and resources is increasingly important. The proposed project will add knowledge to the field in vital areas.

Fostering Students' Academic Dispositions as a Key Part of Academic Improvement Efforts

New research points to the importance of building students' grit, tenacity, and perseverance to support learning and achievement (Schechtman, et al., 2013). Three facets of student dispositions have been shown to be malleable and teachable: student's academic mindsets, effortful control of the learning process, and use of effective strategies and tactics. "Academic mindsets" encompass elements of academic identity, attitude, and academic persistence that are critical to students' academic success (Farrington et al., 2012; Yeager and Walton, 2011). Students need help to acquire the academic mindsets and dispositions required

for sustained, academic work (Dweck & Molden, 2005). Particularly students who have struggled with low achievement need support to rebuild robust academic identities that can sustain their efforts in school (Gee, 1996; Litman & Greenleaf, 2008; Mahiri & Godley, 1998). Recent literacy research has identified the instructional characteristics necessary to meet the unique needs of adolescents: treat all students as capable learners; create a collaborative climate of inquiry; build on students' interests and curiosity; tap into students' knowledge and experience; and harness adolescents' preference for social interaction to serve academic goals (HER, 2008; Kamil, et al., 2008; Greenleaf, et al., 2001). To meet adolescents' academic needs, we must transform secondary, subject area classes into collaborative, inquiry-oriented learning environments that challenge students intellectually while helping them build their skills in high level literacy (Schoenbach & Greenleaf, 2009).

SLI is uniquely positioned to address the intersection of academic mindsets, subject area learning and reading comprehension because of its demonstrated success in helping teachers and their students tackle complex texts and gain new academic dispositions through the metacognitive and mentoring experiences designed into Reading Apprenticeship (CASEL, forthcoming. *Effective Social and Emotional Learning Programs: Secondary Guide Edition*. www.casel.org/guide). RA targets both cognitive and non-cognitive barriers to achievement. Its strategies address students' motivational needs, build skills and knowledge for subject-specific literacy tasks, and strengthen students' view of themselves as readers and learners. Through a focus on extensive interaction with text, RA gives students abundant opportunities and support to engage in meaning making with complex materials. In the process, students develop both "growth and grit" and the skills to break the seemingly impenetrable codes of academic language. In line with research demonstrating that individuals tend to engage in activities in

which they feel confident of success (Bandura, 1989), the RA model explicitly invites students to share what they find confusing, boring, and off-putting about academic reading as a way to defuse resignation and to build stamina, confidence, and skills. Students learn to redefine success in terms of intellectual engagement, rather than right answers. RA's collaborative learning structures and metacognitive routines make students' thinking and affective responses available so that teachers can acknowledge what is happening and support new responses.

Supporting Secondary Teachers to Advance Student's Literacy Skills to New Standards

Very few professional development models have been able to show a clear correlation between changes in teacher classroom practice and impacts on students' learning and social engagement as RA has (See Appendix E.1: Effectiveness). The model provides a uniquely designed, inquiry-based and content area-focused professional development approach that transforms teachers' understanding of their role in adolescent literacy development and builds enduring capacity for literacy instruction in the academic disciplines (Greenleaf & Schoenbach, 2004; Greenleaf, et al., 2011a, b). RA professional development is designed to address teachers' conceptual understandings as well as practical implementation needs. Teachers participate in carefully designed inquiries to help them unlock their own disciplinary literacy expertise and to appropriate new approaches from their peers. Science teachers, for instance, inquire deeply into what they do to derive meaning with complex science texts, including exposition in science journals as well as the diagrams, data arrays, mathematical expressions, and graphs that convey information in science. Similarly, history teachers inquire into the kinds of comprehension challenges students face in their classrooms such as interpretation of maps, primary source documents of various genres, and archaic language.

RA professional development inquiries mirror and model instructional practices that

engage all learners in grappling with complex texts through collaborative, metacognitive reading routines. In professional development (PD) sessions, teachers practice with classroom routines to build student engagement, support student collaboration, and foster authentic discussion and problem solving around course texts. Most importantly, they gain new expectations of what their students can accomplish and learn new ways to support students' thinking and learning with academic materials. In RA PD, teachers learn to attend to students' affective and identity issues, creating relevant and affectively safe learning opportunities that help students become better disposed to engage in academic tasks, discipline-based literacy practices, and inquiry, and to develop identities as resilient learners. Thus, teachers of all academic subjects learn to identify the features of disciplinary texts that might present stumbling blocks to learners and learn how to build classroom cultures that foster risk-taking and collaboration to draw on and build the knowledge and strategic capacity of diverse learners.

Increase Cost-Effectiveness and Sustainability of High Quality PD

For this SEED grant, we propose a model of professional learning that includes 42 hours instead of 60 hours of face-to-face PD, in cross-disciplinary teams rather than subject-specific groupings. To further reduce costs and yet provide sufficient and high quality support, we build locally-led follow-up into teachers' second year of implementation. By testing the impact of this model on student outcomes, we will be providing an important existing proof of implementing high quality PD in a more cost-effective manner. Key elements to the model we are testing here are: 1) the role of local support organizations to both assure "flexible fidelity" of the proven intervention (RA) and make wise adaptations suited to local context, and 2) the key leverage offered by school-based teams of site administrators and teacher leaders focused on improving school wide teaching and learning through a focus on subject area literacy.

Build Effective Exchanges of “Knowledge in Use” to Improve Teaching and Learning

SLI has a long history of involving educators in partnerships for innovation. Since 1995, SLI has developed and refined the RA instructional framework and PD model through iterative research and development processes in collaboration with practitioners around the U.S. serving varied populations, thus developing and expanding resources, tools, and approaches to an ever-growing set of circumstances (Greenleaf & Schoenbach, 2001; Greenleaf & Katz, 2004). These processes have, over time, resulted in new knowledge and practices through processes of joint inquiry into texts and tasks and instructional supports, collaborative design of routines and lessons, classroom try-outs and reflections, and documentation and examination of student work and learning, leading to renewed efforts and refinements (Schoenbach, Greenleaf, Cziko & Hurwitz, 1999; Schoenbach, Greenleaf & Murphy, 2012).

The RAAD project’s focus on providing follow-up support for schools as teacher teams, teacher leaders and site administrators work together to build strong academic literacy support across their schools, creating greater likelihood that practices will be “owned” by the participating schools. Moreover, ongoing exchanges between local partnering organizations, SLI staff and facilitators, and school leadership teams will guide the ongoing implementation work of the project. These exchanges result in innovation and problem solving to support implementation, in ways that cannot be anticipated fully in advance (Greenleaf, Schoenbach & Murphy, 2014). Documenting these efforts will build knowledge and resources for the field.

C. Importance or Magnitude of the Results or Outcomes Likely to be Attained

We expect the importance and magnitude of this project’s results to be significant based on prior strong evidence that met WWC standards without reservation (WWC, 2009; 2010). The study by Kemple, et al. (2008), Corrin, et al., (2009) and Somers, et al. (2010) that met WWC standards without reservation (WWC, 2009; 2010) examined the effects of RA as one of the two

literacy programs that were implemented with two cohorts of over 2,000 9th grade students in 34 high schools in ten districts. Students enrolled in the study were 9th graders who scored one to five years behind their grade level in reading comprehension, according to national norms (Somers, et al., 2010). The researchers from these studies found a statistically significant positive effect of RA on a standardized reading comprehension test (ES = .14). Thus for the comprehension domain, the study showed statistically significant positive effects of RA. In addition, in the follow-up report of the Somers, et al. study, not officially rated by the WWC but meeting the WWC evidence standards with and without reservations for additional outcome domains, the authors report statistically significant favorable effects of the intervention on state subject area tests in English language arts (ES = .15) and science (ES = .14), behavior (fewer suspensions) and credit accumulation.

Another group-randomized IES-funded study of RA effects in high school history and biology classes demonstrated strong positive effects on teacher practice resulting from the RA professional development—most notably, teachers’ increased use of reading comprehension strategy instruction, metacognitive inquiry routines, and collaborative learning structures in their classrooms (Greenleaf, et al., 2011a). The effect sizes for classroom practice differences were large, ranging from 0.8 to 2.2 standard deviations. Students in treatment schools exhibited higher scores in history (ES=0.25), reading comprehension (ES=.22), and English language arts (ES=0.26). For the biology sample, students in treatment schools exhibited higher scores in biology only (ES=0.29). Although not rated, this study may meet WWC standards.

Since 1995, nine research studies have been conducted to evaluate the effectiveness of RA. Several of the studies utilized an external evaluation team and a strong experimental design to gauge program impacts (Greenleaf, et al., 2009; Greenleaf, et al., 2011a; Greenleaf, et al.,

2011b; Kemple et al., 2008; Somers, et al., 2010). These studies collectively suggest that the RA intervention proposed in this application effectively improves student achievement on state-mandated norm-referenced tests in English language arts, reading comprehension, history, and science. These studies have also demonstrated strong positive effects on teacher practice resulting from the RA professional development. They also show positive effects on students' literacy achievement, motivation, and engagement and that English learners benefited disproportionately from RA instruction. Thus, prior experimental studies represent considerable evidence that RA strengthens literacy instruction and improves student achievement in both literacy and content area skills and knowledge, with effect sizes for achievement that constitute educationally meaningful gains. The multiple studies also demonstrate a moderate degree of external validity, that is, RA has been tested in multiple and varying contexts with diverse student and teacher populations, moderately large sample sizes, and different subject areas.

In addition to experimental studies, several studies using quasi-experimental designs and a mix of quantitative and qualitative methods, including case studies, show positive outcomes for middle school and high school students and their teachers (Greenleaf, et al., 2001; Greenleaf, 2002; Greenleaf, Litman, & Braunger, 2004; Greenleaf & Schoenbach, 2001; Strategic Literacy Initiative, 2004; 2009). These studies also show positive effects on students' literacy achievement, motivation, and engagement and that English learners benefited disproportionately from RA instruction. These studies are relevant to the proposed RAAD projects in that they show positive impacts on teacher practice and student achievement when middle and high school teachers are grouped in cross-disciplinary teams for professional learning. (See Appendix E.1.)

Based on this prior evidence of success, SLI anticipates the proposed RAAD project will add knowledge to the field about the affordances and constraints of online and face-to-face

professional learning. To date, efficacy studies of RA have linked teacher improvement in literacy instruction to increased engagement and achievement in students' reading and content area learning, largely in 60+hour formats. The proposed project will investigate whether these same kinds of student outcomes can result from a less intensive cross-disciplinary professional development model (42 hours) coupled with online and locally supported site-based and network-based support. The project thus promises to build a deeper understanding in the field about the potential of using varied levels and types of support for increasing teacher effectiveness as measured by impact on students' learning dispositions, metacognitive skills, and reading comprehension. We anticipate that participating teachers will demonstrate greater capacity to integrate literacy practices into ongoing subject area teaching, as measured by changes in classroom instructional routines, with positive impacts on student engagement and literacy achievement. The project is thereby expected to increase the number of effective teachers in middle and high school subject area classrooms serving high needs students.

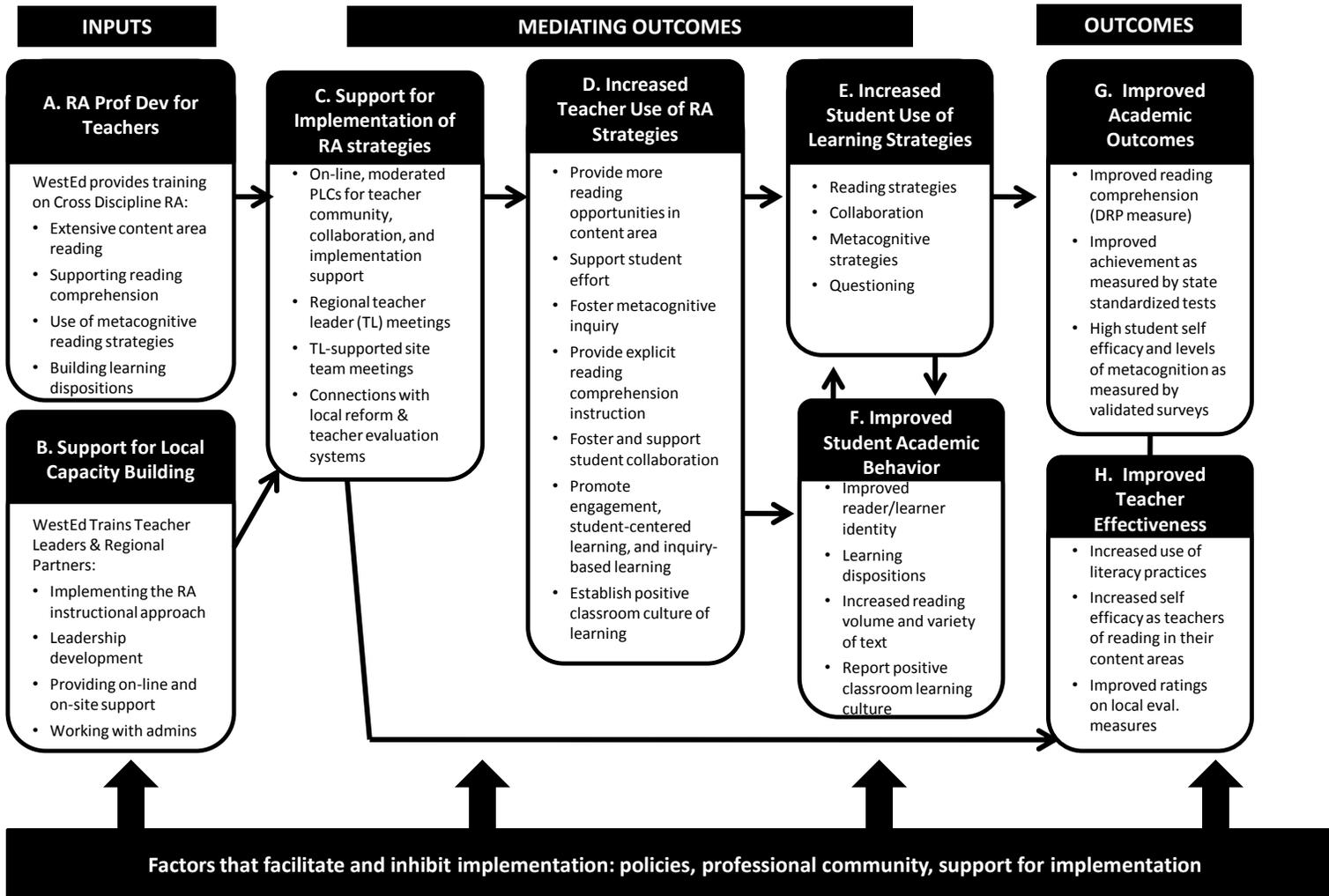
III. QUALITY OF PROJECT DESIGN AND SERVICES

The logic informing our project design, as shown in Figure 1, is as follows: Professional development in RA coupled with leadership development and support for implementation will enable middle and high school content area teachers to integrate academic literacy instruction into ongoing teaching, thereby increasing the quality of students' literacy learning opportunities, leading to increased academic engagement and achievement, especially for high-need students.

A. Goals and Objectives are Specified, Aligned, and Measurable

The goals and objectives of the proposed RAAD project are described below. See Table 6 at the end of this document for a description of the measures related to each of the proposed goals and objectives.

Figure 1. Project Logic Model



Goal 1: Increase the number of highly effective middle and high school teachers serving high needs students by engaging 2,000 teachers in Reading Apprenticeship professional learning; approximately 20% of these will be STEM teachers. (Absolute Priority 3; Competitive Preference 2; Competitive Preference 3; Competitive Preference 4)

Objective 1: Recruit 2,000 middle and high school teachers for engagement in professional development and school level improvement in teaching and learning

The proposed RAAD program will support the expansion of Reading Apprenticeship into two large urban districts, Chicago and New York City public schools, as well as schools in Texas and in Michigan. We will develop RA leadership and sustainability by working with established local partners organizations: The University of Chicago’s Network for College Success, the Texas Center for Educator Effectiveness based in Austin, and the Middle Schools Quality Initiative (MSQI) in NYC. We will continue an existing partnership with Michigan school networks under the leadership of Dr. William Lloyd, former MI educator and administrator who has served as our MI State Coordinator for more than five years. All four partners will tap existing network and local evaluation structures to support the development of stronger teacher and administrator communities of practice, leading to greater depth, breadth, and sustainability at district or regional levels.

Objective 2: Provide Reading Apprenticeship professional development and support for implementation for 2,000 middle and high school teachers

The project will serve multiple cohorts of middle and high school teachers. Initially, we anticipate that an average of six teachers per school will participate in the PD, with about six schools per network in the PD sessions. Middle and high schools in feeder patterns will attend the PD together, increasing the articulation and coherence of the initiative across the upper grade levels. We will seek participants from the most common academic subject areas – specifically ELA, science and social studies teachers – but will also include teachers beyond the core academic disciplines. SLI has a deep bench of experience conducting professional development

for cross-disciplinary groups involving career and technical education, music, foreign language, special education, arts, P.E., economics, and government teachers. A second cohort of six or more teachers from each participating school will be invited to participate in the subsequent year. This cohort model will allow the project to build momentum from within schools, as teachers across subject areas take up RA practices and begin sharing their work with colleagues. Additional middle and high schools will also be invited to participate.

Objective 3: Provide follow-up support for high-quality implementation through online professional learning communities

In this project we will expand on the knowledge, tools, and specific design principles developed in the process of having successfully created online professional learning communities since 2011. To date, SLI has developed seven online professional learning environments based on the RA framework for a variety of audiences: high school science teachers; middle school science, history and English teachers; secondary-school site administrators; community college faculty; community college inquiry coaches and campus leaders; online support for facilitators of Reading Apprenticeship PD; and a “MOOC” open to an international audience of the general public (see Appendix E.2 for sample course screen shots). Two of these courses are currently being evaluated in RCTs. New lessons for the field from the proposed project are likely to include both very specific findings—such as the specific affordances of various online interactions for inquiry—and more general lessons about the ways in which the opportunities of online professional development, including flexible scheduling, cost-effectiveness, differentiation, and affordances of novel web-based technologies are balanced with the potential trade-offs, losses, or constraints of online versus face-to-face PD.

Goal 2: Improve high needs middle and high school students’ reading comprehension, academic achievement, metacognitive skills and positive learning dispositions by increasing opportunities to learn. (Absolute Priority 1; Competitive Preference 1; Competitive Preference 4)

Objective 1: Teachers provide effective instruction for discipline-specific reading comprehension by implementing RA routines

In RA classrooms, reading instruction is integrated into content area teaching, rather than being an instructional add-on or additional curriculum. Students are given extended opportunities to read complex materials with instructional support, both in assigned texts and in curriculum-related materials of choice. Through an “apprenticeship” process, content area teachers explicitly teach students the tacit reasoning processes, strategies, and discourse rules that shape successful reading in their disciplines. Instructional routines help students to clarify content, discuss the processes they use in reading and problem-solving, practice comprehension strategies, respond to and elaborate on content, engage in word-learning strategies, as well as to consolidate learning and make connections to other related texts (see RA Framework in Appendix E.3).

To foster meaning-making, RA classrooms create a context in which teachers and students articulate and understand thinking strategies and processes within their disciplines, so that students not only understand texts, but are able to apply and transform them—they “think aloud” through written comments on one another’s papers; they deeply explore themes and texts within historical context; they write reasoned responses to real-world problems that include references to multiple texts; teachers and students closely examine texts by slowing down, asking questions out loud, describing personal experience and knowledge, stating their points of confusion, and sharing problem-solving strategies. These metacognitive routines, when integrated regularly into classrooms, develop in students the literacy skills required in CCSS standards and assessments, college courses, civic life, and a multitude of professions.

The core pedagogical routines of RA thus multi-task to support reading of complex texts, and writing to learn while reading and thinking about texts and ideas. It is this ongoing and consistent practice, supported by routines set in place in a Reading Apprenticeship classroom

that provides the kind of scaffolding and support for students to build their academic dispositions and engagement, and continue to expand their knowledge about the topics they are exploring.

As teacher participants use the RA routines and approaches in their own classroom instruction, they will positively impact student reading, learning and self-regulation. Students in RA classrooms will experience an increase in the amount and complexity of texts they read reading routines that make discipline-specific ways of reading and thinking visible; and greater metacognitive awareness about *how* and *why* they are making sense of text because they are continually asked to read, write, and talk about their thinking while also seeing their teachers repeatedly model this process

Objective 2: Teachers provide effective support for development of students' learning dispositions, self-efficacy and confidence in their literacy abilities

Typical instructional strategies for struggling readers involve simplifying, slowing the pace, and often abandoning more rigorous course work with the tacit understanding that the students are simply not capable of performing at grade appropriate levels of rigor, virtually assuring low levels of achievement for students who are already behind (Dweck & Molden, 2005). In contrast, the RA model is based on research showing that most students are capable of complex thinking and carrying out scientific, historical, and literary inquiry but have not been given the skills or self-confidence to approach these tasks effectively (Greenleaf, et al., 2001; Langer, 2001; Lee & Spratley, 2010; Moje, et al., 2008). Unique among literacy programs, RA addresses students' learning dispositions and motivational needs while building skills and knowledge for subject-specific literacy tasks, strengthening students' view of themselves as learners, and yielding documented gains in achievement (Schoenbach & Greenleaf, 2009).

Research documents the effectiveness of interventions aimed at shifting students' explanation of setbacks from stable internal causes—"I can't understand science"—to

temporary, external causes—“This is really hard, and I need someone to help me ‘get’ it” (Cohen, Steele, & Ross, 1999; Walton & Cohen, 2007, 2011; Wilson & Linville, 1985). RA teachers “normalize struggle” (Walsh, 2002) and thus shift the definition of success from performance to effort. In such an environment, students learn to experiment, fail, modify the parameters, and try again— thus developing their belief in the value of academic effort and persistence, their mastery of learning strategies that support academic achievement, and their identities as resilient learners.

The increased use of literacy strategies and materials will develop generative learning routines and strong school “habits” for students, but also importantly increase their sense of agency and authority over text. Thus, when they are asked to argue, discuss, or respond to multiple texts—as they will be more and more given the demands of new standards—they will have learning strategies and dispositions to support their work to *understand* the text and experience discussing *what* they think about the texts they read. These skills in turn develop students’ self-efficacy and motivation for reading and learning in the disciplines. Students’ use of metacognitive routines and literacy learning strategies, together with their enhanced self-efficacy, will improve their ability to perform on assessments requiring them to comprehend expository texts of increasing complexity.

Goal 3: Build local capacity for strong and sustained implementation of effective academic literacy practices through school and regional network support (*Absolute Priority 3; Competitive Preference 2*)

The RAAD project will involve four partners to support and spread the innovation: the Chicago Network for College Success, the Texas Center for Educator Effectiveness, the Middle School Quality Initiative in NYC, and Michigan Reading Apprenticeship. The project will develop local capacity for this work by building on these four partners’ existing relationships with local schools to recruit and engage school teams of teachers to participate in RAAD

professional development sessions and ongoing learning; to convene and facilitate quarterly meetings of teacher leaders who in turn will learn to convene and facilitate PLCs and school-based meetings; and to engage site administrators in the regular teacher leader meetings as well as other gatherings related to existing network efforts.

The local partners in this proposal have deep experience bringing teachers together for learning and collaboration, and attest to the strong fit of RA with district goals and regional teacher support systems. All but one of these partners have past experience with RA and all have many schools eager to participate (see partner and school letters).

Objective 1: Build local partners' capacity to support and sustain RA implementation

Local partners will participate in multiple face-to-face and online professional development sessions in order to be able to provide strong support for local schools through their teacher leaders and site administrators over the course of the grant and beyond. In the second summer of the grant, they will gather for a national workshop to reflect on the experiences at each of the local sites, to practice and deepen their understanding of protocols for supporting teacher learning, and to share ideas, challenges and resources that have been locally generated. In addition, local partners will support expanding circles of impact beyond the 2,000 secondary teachers directly trained in RAAD. Teacher leaders will have opportunities at teacher leader meetings hosted by SLI and local partners to practice using protocols for sharing RA ideas with other interested teachers at their schools. These would include a range of “easy entry” ways to share the model, from sharing lessons that illustrate how students read and write in new ways to initiating book circles with the core text used in RA PD, *Reading for Understanding*, as a way to begin to dip into some of the core ideas and practices of RA. The local capacity of each local partner for RA implementation will grow over the life of the grant, providing a transition to and support for sustainability after the end of the grant.

Objective 2: Local partners build capacity of teacher leader and site administrators for school-wide literacy improvement through quarterly meetings

A key leverage point for building local capacity to increase the number of highly effective teachers is developing a strong teacher leader and site administrator collaboration at each school, increasingly able to lead their participating RAAD teams, and then others beyond the team to implement improved content literacy practices. Each RAAD school team will be asked to select a teacher leader to support team members in both formal and informal ways, including participation in online professional learning meetings.

A series of six cross-school teacher leader and administrator meetings (three in Year 2, three in Year 3) will offer opportunities to share ideas and problem solve ways to support more effective team meetings and collaborate with colleagues. Local partners, building on and extending existing relationships with school administrators, and able to persuasively connect the RAAD professional development with other local reforms initiatives, will encourage the participation of site administrators in RA PD with their teams and in the quarterly teacher leader meetings (see Appendix E.4 for sample agendas).

Local partners will help teacher leaders and their administrators make explicit the connections between RA and other existing reforms. For example, our existing partnership with the Network for College Success in Chicago includes a group of educators engaged in an on-going conversation about the connections between Reading Apprenticeship classroom practices and the Chicago version of the Danielson Teacher Effectiveness framework.

In addition to quarterly teacher leader and administrator meetings, teacher leaders will “apprentice” to the facilitators of the online professional learning communities in their first year of work—learning the protocols of inquiry to deepen RA implementation. In their second year as teacher leaders, they will continue participating in the network-wide teacher leader and

administrator meetings and in addition either convene monthly meetings on-site or help facilitate online professional learning communities. Each local partner, in consultation with SLI central office and other network leaders will provide support for teacher leaders as they assume these new roles, thereby growing local capacity.

Objective 3: Develop and maintain cross-national network with local partners and SLI

To continue knowledge sharing across the four local partner sites, SLI will regularly convene leaders from Chicago, New York, Michigan and Texas for meetings (monthly by Skype and annually in person). We have learned, from prior national grants with multiple partners, that there is tremendous potential for problem-solving across local partner leaders. In addition to sharing with each other and SLI staff, local partners will provide formative assessment for SLI staff, upon which to make adjustments and continually develop theory and practice in this work.

B. Professional Development is of Sufficient Quality, Intensity and Duration

The project is designed to provide high quality professional development with ongoing support for effective implementation of RA. Each subject area teacher will receive the equivalent of 42 hours of hybrid professional development—a mix of face-to-face and online with on-site follow-up in the first year of their involvement in the project¹, followed by locally-supported monthly PLCs and team meetings in the second year (see Table 3 for PD schedule). The professional development will be built on existing resources that have been developed, field-tested, and refined by SLI over the past 18 years. These include:

- *RA resource materials* including sample texts and text sets drawn from varied subject areas; student case studies, work, and interviews; assessment tools and rubrics, videos of classroom literacy interactions; lesson models and demonstrations of RA teaching approaches;

¹ Five, six-hour days of face-to-face PD =30 hours; eight online PLC s (90 mintes each) =12 hours

- *RA training materials* including detailed facilitator and participant manuals that have been carefully developed and continuously improved to document and standardize professional development methods (sample Agendas in Appendix E.5);
- A core book authored by SLI’s Co-Directors and used nationally in the literacy education of teachers: *Reading for Understanding: How Reading Apprenticeship Improves Disciplinary Learning in Secondary and College Classrooms* (Schoenbach, Greenleaf, & Murphy, 2012) as well as ancillary professional readings about subject-specific reading and writing instruction;
- A forthcoming book for Teacher Leaders and administrators—working title *Reading Apprenticeship Leaders’ Guide* (Schoenbach, Greenleaf & Murphy, forthcoming)—authored by SLI’s Co-Directors, will be used with literacy leadership teams as they build cultures of on-going academic engagement and improvement, adapted for their local contexts, and rooted in principles, examples and protocols from Reading Apprenticeship communities (see Table of Contents in Appendix E.6).

In RA PD sessions, teachers practice classroom routines to build student engagement, support student collaboration, and foster authentic discussion and problem solving around course texts. Most importantly, they gain new expectations of what their students can accomplish and learn new ways to support students’ thinking and learning with academic materials. By implementing RA routines, they transform their classrooms into engaging, intellectual learning spaces. Across subject areas, teachers are then able to compare their literacy practices and see the vital role they each play in developing their students into strong readers and learners.

In particular, teachers learn to foster a collective “code-breaking” stance to build students’ interest in solving the puzzle of complex words, sentences, and ideas. RA teachers learn to build students’ identities as resilient learners and their dispositions to engage in academic tasks by creating relevant learning opportunities in a safe environment where risk taking is rewarded (Yeager & Dweck, 2012). They learn to demonstrate their own problem-solving strategies, modeling how they use their linguistic and content-knowledge resources. They build students’ stamina for increasingly long and complex texts, involving students in identifying their own successes and weaknesses and in setting personally relevant reading goals.

C. The Project is a Comprehensive Effort to Support High Quality Teaching and Learning

Participating RAAD schools will have a strong foundation for comprehensive academic literacy improvement through a set of coherent, local capacity-building activities and support structures: cross-disciplinary school teams; team meetings facilitated by teacher leaders and joined at times by administrators; teacher leaders leading from their own RA classroom practice and supported by a community of other teacher leaders; the SLI national office, and Local Partners who have solid track records of working closely with their school district (see Table 1 below and partner letters of support, Appendix D).

Table 1: Partner Support for Comprehensive Instructional Improvement

Network for College Success, University of Chicago
NCS has directly supported approximately 150 Chicago teachers across 13 schools with coaching and cross-school professional learning communities. NCS provides opportunities for teachers to process and practice their new knowledge through discipline-specific trainings and year-round school-based coaching, cross-school Communities of Practice, and school-based learning communities. About 300 teachers in Chicago Networks have participated in Reading Apprenticeship, but none from Network 11 where we will focus this effort. NCS Director MaryAnn Pitcher will serve on the RAAD Management Team; Pitcher and Chief of Network 11 Elizabeth Kirby have met with SLI and Chicago Public Schools Director of Literacy, Julie Burnett , who is creating a secondary literacy plan with Reading Apprenticeship as a key support.
The Middle School Quality Initiative (MSQI)
MSQI is the New York City Department of Education’s focused effort to expand the number of middle schools that prepared students for college and career success. It includes a focus on literacy across the curriculum, teacher collaboration and dedicated time for extensive reading. MSQI serves as the city’s implementation plan for putting the Carnegie Corp’s <i>Reading Next</i> recommendations into action, which are strongly aligned with Reading Apprenticeship (Biancarosa and Snow, 2004). In the past two years (2013-15), a pilot project has supported science and history teachers’ participation in RA PD, as well as regular coaching facilitated by Reading Apprenticeship Lead Facilitator Maryann Liberati. Many of these teachers have participated in interviews describing their experience with infusing RA literacy practices into their content area learning, and several have collected data in their classrooms showing positive student behavior and achievement changes they attribute to this work. MSQI Director Jenna Shumsky is very interested in further Reading Apprenticeship implementation in support of the comprehensive MSQI initiative.

The Texas Center for Educator Effectiveness (TxCEE)

TxCEE created the System for Effective Educator Development (SEED) framework, a district-wide professional learning system that allows for systemic practices that embed educator professional development along with purposeful collaboration focused on improving instruction and student learning. PLCs within a school district consist of four distinct and operational components: district, principal, school, and teacher-level CLCs so that program practices align with school goals and objectives to improve student achievement through district priorities. Texas in particular will serve as a strong case study for deeper examination of the interaction of the RA professional learning and a sophisticated, generative evaluation system that includes student growth. Educator evaluation systems, comprised of multiple observations and measures of student growth, are at the center of their Human Capital Management System which was developed with TIF grants. The teacher evaluation systems include three measures: (1) individual academic growth, (2) school-wide academic growth, and (3) teacher observation scores utilizing a rigorous, research-based observation tool. **TxCEE Executive Director Tammy Kreuz** and **senior staff member Jessica Navarro** will work extensively with SLI to integrate RA into these existing structures.

Michigan Reading Apprenticeship

Michigan has a long history as an SLI partner, boasts more Reading Apprenticeship facilitators than any other state, and supports hundreds of schools in the state who are implementing the framework, yet there remain many schools and districts with high need and strong interest (see Appendix D for letters of support), especially in STEM content areas. In 2013-14, only 20% of 8th grade students rated proficient on the state math test and only 18% rated proficient on the state science test (MEAP, Michigan School Data, mischooldata.org). The MI State Department of Education has selected RA as one of the few approved “evidence-based interventions” that program improvement schools can adopt. In 2015-16 about 300 secondary teachers will be engaged in the current SEED funded work there.

D. The Project Addresses the Needs of Disadvantaged Students (*Competitive Preference 4*)

Our local partners serve many schools with high concentrations of high need and disadvantaged students. For example, in Chicago, 40% of 8th graders did not meet the national average in reading on the NWEA Measures of Academic Progress (MAP) test. On average, Chicago Public Schools (CPS) high school students score below the ACT college readiness benchmarks on standardized test scores. Only 30% of 9th graders, 20% of 10th graders, and 27% of 11th graders met or exceeded college readiness benchmarks in their respective standardized tests for reading (Explore, Plan, and ACT). The average composite ACT score for CPS juniors was 18 out of 36. The 2014 graduation rate for CPS was 69% compared to the national average of 80%; and of CPS graduates, only 38% enrolled in a four-year college in 2013. Similarly,

reading and science achievement among NYC 8th graders is particularly low: 57% of 8th graders scored in the proficient range on the state ELA test and less than half (49%) scored in the proficient range on the state science test (NYC Department of Education, 2009a, 2009b). Achievement on the National Assessment of Educational Progress is similarly dismal in NYC: 21% of 8th graders were proficient in reading and 13% in science in 2009 (National Center for Education Statistics, 2011a, 2011b). As mentioned in Table 1 above, MI has similarly dismal proficiency levels on state science and math tests. SLI will prioritize schools serving high concentrations of English learners, students with low prior achievement, and students living in poverty to participate in RAAD.

IV. QUALITY OF THE MANAGEMENT PLAN AND PERSONNEL

A. Qualifications and Resources to Effectively Carry Out Project and Evaluation

The Strategic Literacy Initiative at WestEd (SLI) has extensive experience and capacity to carry out the proposed SEED project. SLI's leadership, organizational infrastructure, human capital and material resources assure that the proposed scope of work will be well executed.

Leadership, Track Record and Field Recognition. Greenleaf and Schoenbach, have worked together for 20+ years implementing and refining Reading Apprenticeship with the investment and partnership of educators, researchers, local and national foundations, the federal government and many LEAs. They have grown RA from a small teacher collaborative in San Francisco to a stable WestEd research, development and service program that carries out federally funded studies and delivers professional learning to thousands of educators across the country each year. Greenleaf and Schoenbach have published and presented the RA model broadly, thereby influencing the field of adolescent and disciplinary literacy and building the visibility of this innovative approach (see Vitae, Appendix A). RA has received widespread recognition for its unique characteristics and effectiveness by leaders in the field, as the many

publications citing it attest (e.g. Biancarosa & Snow, 2004; Deschler, et al., 2007; Lee & Spratley, 2010; Snow, Griffin, & Burns, 2006). Additionally, Greenleaf and Schoenbach's experience as PIs and Co-PIs on federally funded research studies, and three current Office of Innovation grants attest to their qualifications.

Human Capital and Resources. Greenleaf and Schoenbach manage a highly qualified staff that includes educators, researchers, staff developers and project managers. Also key to the execution of this proposed work are 80+ consultants around the country who have deep RA experience and expertise. Most are active classroom teachers, assuring credible “leading from practice”; their continual growth is supported by participation in “Facilitator Central,” an online forum managed by SLI. To support RA consistency and quality of implementation, SLI has an extensive materials library that includes assessment tools, curriculum examples, online course materials, videos of RA teachers in varied, real classroom settings, and facilitation guides. SLI's social media, online communities and website, www.readingapprenticeship.org, make many of these resources available to a wide audience.

WestEd Infrastructure. As a WestEd project, SLI is able to draw on the seasoned infrastructure (human resources, finance, contracts, IT, and communications), and resources of a \$120+ million national organization. WestEd is a preeminent educational research, development, and service organization with 600 employees and 17 offices nationwide. WestEd has been a leader in moving research into practice by conducting research and development (R&D) programs, projects, and evaluations; by providing training and technical assistance; and by working with policymakers and practitioners at state and local levels to carry out large-scale school improvement and innovative change efforts. The agency's mission is to promote excellence, achieve equity, and improve learning for children, youth, and adults.

SLI at WestEd is the prime applicant and will serve as the lead agency and house key staff. In this role, SLI will: 1) Provide Reading Apprenticeship professional learning and local partner support to lead small learning communities focused on literacy instruction; 2) Convene local partners to assess progress, address problems and share best practice; 3) Manage the budget and finances; 4) Report progress to U.S. Department of Education; 5) Disseminate learning nationally; and 6) Participate in regular status meetings with the evaluators. Jason Snipes at WestEd will lead the evaluation, with external partner, IMPAQ International managing the data collection for the evaluation. These evaluation team members will report to the Office of Innovation as needed and collaborate with WestEd on reporting and dissemination from the project. Qualifications and roles of key staff are described in Table 2 below.

TABLE 2: Key Personnel, Qualifications and Roles

Person, Role	Qualifications and Duties
<i>Cynthia Greenleaf</i> Principal Investigator	Dr. Greenleaf is SLI’s Co-Director and has extensive experience managing large studies funded by awards from NSF, IES and OII. As PI, Greenleaf will have primary responsibility for the RAAD project. She will meet regularly with WestEd and evaluation colleagues, manage the design team working to produce resources for the professional development and oversee the evaluation activities related to local partner capacity building.
<i>Jason Snipes</i> Co – Principal Investigator	Dr. Snipes is the Director of Alliance Research for REL West at WetsEd. He has 17 years of experience managing and analyzing data from rigorous education evaluations. He has designed and led multiple randomized trials. Dr. Snipes will lead evaluation design, instrument development, analysis, and will coordinate teams working on measurement, analysis, interpretation and reporting.
<i>Ruth Schoenbach,</i> Co-Project Manager	Schoenbach is Co-Director of SLI and has created and managed numerous projects over 30+ years. Her work includes designing and managing PD and publications for secondary and college teachers and teacher educators. Currently, she is Project Director for SLI’s two i3 grants. She will co-manage the project with Stump, with an emphasis on finance and oversight of the professional learning and teacher leader communities.

<i>Mary Stump Co-Project Manager</i>	Stump is SLI’s Associate Director and has 20+ years of experience in education, non-profit management and literacy. She is currently managing SLI’s 2012 SEED grant and the national coordination of the i3 RAISE grant. She will manage timelines, daily project implementation and reporting. She will convene the RAAD Coordinators via monthly conference/video calls to plan, monitor progress, collaborate and solve problems.
<i>Cheri Fancsali, Lead Evaluator</i>	Dr. Fancsali is Director of Research at IMPAQ. She will lead the external evaluation, overseeing research design, management and reporting. She has over two decades of experience in evaluations of school- and community-based educational reforms that target at-risk youth, especially programs pertaining to school reform, teacher PD, and STEM (science, technology, engineering, and math). She is currently principal investigator and project director of a five-year randomized controlled trial of RA funded by an i3 grant, for which she has successfully recruited 42 schools and more than 290 teachers.
<i>Yasuyo Abe, Evaluation Methodologist</i>	Dr. Abe has over 20 years of experience in conducting and managing public policy and economic research in fields such as education, human services, and workforce development. She has expertise in the application of statistical and econometric analysis methods and has extensive experience designing and conducting experimental and quasi-experimental studies. Dr. Abe has made lead contributions as a quantitative methodologist in a number of projects.

Local Partners (described in section IIIC above) also have key roles and responsibilities. They will monitor progress against the project plan, recruit high-need schools for participation, convene network meetings of Teacher Leaders, coordinate the logistics for PD, solve problems, provide ongoing support, and build sustainability and infrastructure. Each local partner will designate a leader to participate in regular RAAD Management Team meetings (web-based & phone) managed by WestEd, and ensure their organizations’ roles and responsibilities are met.

B. Project Timeline, Responsibilities and Milestones

Table 3 (below) outlines the timeline, roles and milestones in brief. To assure the effective execution of this proposal, SLI developed comprehensive goals and objectives (see Table 6), named personnel with designated roles (Table 2 above) and a detailed timeline (see Appendix E.7).

Table 3: Timeline and Milestones

	<i>Teaching & Learning (WestEd)</i>	<i>Research & Evaluation (IMPAQ & WestEd)</i>	<i>Capacity Building (WestEd & Partners)</i>
Year 1: 2015-2016	<p>PD and TL agendas & materials complete</p> <p>Online PLC goals, digital materials articulated</p> <p>Online facil community and materials established</p> <p>Facilitators prepped and practices normed</p> <p>Master PD schedule created</p> <p>Co. 1 teachers begin PD</p>	<p>Evaluation plan refined IRB completed Instruments refined</p> <p>MOUs completed</p> <p>Meetings with partners to plan for recruitment and data collection – teacher eval, DRP, surveys</p> <p>50 middle schools serving high needs students recruited & randomized for RCT</p> <p>Additional high school and middle schools recruited</p>	<p>Management Team (MT) normed & communication systems established</p> <p>Kick off meeting (all coordinators)</p> <p>Local site plans complete to integrate PLCs, leadership into local context</p> <p>Monthly MT meetings (phone/web) to share practice, problem solve</p> <p>Teacher Leaders (TLs) identified</p>
Year 2: 2016-2017	<p>Co. 1 continues PD & PLCs and implements RA practices</p> <p>Second wave of teachers recruited from Co. 1 schools</p> <p>New middle and high schools recruited in feeder patterns</p> <p>PD materials/schedules refined</p> <p>Co. 2 teachers begin PD</p>	<p>Data collection – TG & CG</p> <p>-Teacher surveys (3)</p> <p>-Student survey (1)</p> <p>DRP Reading Comp (1)</p> <p>- State test data</p> <p>- Formative data collection</p> <p>Eval Team and MT meet to monitor progress and improve the project using eval data</p>	<p>Partners host quarterly TL meetings</p> <p>Monthly MT meetings</p> <p>Co. 2 TLs identified</p> <p>TLs & Partners complete leadership PD</p> <p>TLs begin facilitating site team meetings/online PLCs</p> <p>Sustainability & local site plans drafted</p>
Year 3: 2017-2018	<p>Co. 1 continues RA implementation</p> <p>Co. 2 completes PD & implements RA practices</p> <p>CG completes PD & implements RA practices</p>	<p>Data collection – TG and CG (same as Yr. 2)</p> <p>Eval Team and MT meet to monitor progress and improve the project using evaluation data</p> <p>Analysis & reports complete</p>	<p>Monthly MT meetings</p> <p>TLs lead site team meetings and PLCs</p> <p>School Teams lead whole-school RA Intro</p> <p>Partners have capacity & resources to sustain PLC and TL support</p> <p>MT documentation of learning and best practices articulated and disseminated</p>

V. SUSTAINABILITY

A. Comprehensive Stakeholder Buy-in and Advocacy

In implementing fundamental instructional change, teacher buy-in and ownership are key (Elmore, 1996; Dolle et. al., 2013). A report comparing RA to other literacy programs for adolescents concluded that “involving administrators and situating [RA] implementation in the subject areas has created collaborative cultures of literacy with extensive administrative support” (Levin, Catlin, & Elson, 2010). RA leadership development draws on recent understandings of the vital roles played by deep internalization of new practices by teachers (Coburn, 2003) and local buy-in and ownership in sustaining reform (Bryk & Schneider, 2002; Spillane, Reiser, & Reimer, 2002). With the project’s focus on providing follow-up support for schools as teacher teams, teacher leaders and site administrators work together to build strong academic literacy support across their schools, creating greater likelihood that practices will be “owned” by the participating schools.

Supporting the sustainability of SEED work will be an essential part of the partners’ work in the implementation of the project. Their work to create sustainability beyond the grant will include a range of activities—from supporting development of strong local school literacy communities to regularly making connections between the focus of the RAAD approach and other and local reforms, pressures, and opportunities.

In addition to support from WestEd and our foundation partners, SLI has been able to expand its reach significantly, thanks to the support and commitment of key stakeholders at the school, district, county, and state levels. Over the past several years, SLI has seen increasing stakeholder support at higher levels of the educational system, such as county offices of education, intermediate units and state departments of education. While these groups are not always directly involved with the implementation of RA, they are able to use their own resources

to convene teachers across multiple districts to build learning communities around RA, to provide technical assistance to schools and districts, and to disseminate information about RA to schools and districts in their region.

Given that much of RA takes place at the school level, this support is critical to the program’s sustainability beyond the grant period. As evidenced by the letters of commitment in Appendix D, improving student literacy across high school content areas is a key priority for our partner schools and districts. In the words of one of our partners, RA “is not just another initiative that the [district] would undertake,” rather, it is closely integrated into the district’s overall strategy for improving student achievement, and it is supported both by teachers, as well as by the highest levels of district administration.

In short, we believe that the high level of support from our Local Partners—with their existing relationships and strong knowledge of local schools—in combination with the professional development at multiple levels (teachers, teacher leaders, site administrators, local network staff), local capacity building described in this grant increases the likelihood that RA implementation will be sustained beyond the grant period. Ultimately, the pressures for academically rigorous instruction with complex disciplinary texts will continue to drive education decision-makers and practitioners to look to the kinds of transformative solutions that Reading Apprenticeship delivers.

B. Mechanisms to Broadly Disseminate Information

As an organization that develops networks among practitioners, researchers, and policy makers, WestEd has highly regarded outreach services, an award-winning website (www.wested.org), strong social media presence, and print products that disseminate information about its projects to a broad range of audiences. As a key program within WestEd, SLI is often

featured in agency dissemination efforts. In addition, WestEd distributes information about RA through books, book chapters, both popular and refereed articles, social media and presentations in conferences such as AERA and the National Science Teachers Association. SLI's dynamic website (www.readingapprenticeship.org) is also a venue for dissemination and RA resources. Lastly, as a recipient of several U.S. Department of Education research grants, SLI has been invited to present our findings in multiple venues, and our work is featured on the Doing What Works adolescent literacy website.

VI. EVALUATION

WestEd will collaborate with IMPAQ International, an independent social policy research firm, to conduct the evaluation. IMPAQ will collect all of the data for the impact evaluation and execute the analysis for the evaluation. WestEd evaluation staff will collaborate with IMPAQ on the research design, analytic approach, reporting for the evaluation, and will carry out ongoing formative assessment activities to inform project design and improvement.

A. Purpose of the Evaluation

The evaluation of the proposed RAAD project will serve both formative and summative goals, and will provide rigorous evidence regarding both the implementation of RAAD and its impacts on student outcomes and teacher effectiveness. The impact evaluation, based on a school level random assignment design, will focus on identifying effects of RAAD on student literacy and science achievement, on academic dispositions and behaviors that facilitate student success, and on teacher effectiveness. The formative feedback component of the evaluation will focus on: a) implementation of the professional development and teacher supports, teachers' implementation of RA instructional practices, and the factors that either support or hinder effective implementation within the impact study; and b) the capacity of regional partners and

school leaders to sustain and disseminate effective literacy practices among the broader set of participating sites.

B. Research Questions

With these goals in mind, the evaluation will address the following research questions.

Impact Evaluation

1. What is the impact of RAAD on student achievement in literacy and science at the end of 8th grade?
2. What is the impact of RAAD on students' positive academic behaviors and dispositions toward learning among 8th grade students?
3. What is the impact of RAAD on teachers' instructional practices and use of RA strategies among 8th grade ELA, science, and social studies teachers?
4. What is the impact of RAAD on average teacher effectiveness among grade 8 ELA, science, and social studies teachers as measured by their local evaluation systems? What is the impact on the number of teachers rated effective?
5. What is the impact of RAAD on grade 8 ELA, science, and social studies teachers' value added to student literacy?

Implementation Study

6. To what extent were RAAD professional learning activities implemented with fidelity throughout the evaluation sites?
7. What factors facilitate or undermine effective implementation of RAAD?

Formative Assessment and Capacity Building

8. To what extent do teacher leaders and administrators participate in planned RAAD activities such as regional network meetings, PLCs, and school team meetings?
9. To what extent do local partners effectively support ongoing RA implementation at school sites?
10. To what extent are teacher leaders and administrators prepared to engage their broader school communities in learning about and taking up effective literacy practices?

C. Evaluation Design

Impact Evaluation

The impact evaluation will employ a school-level randomized controlled trial in order to identify the effects of RAAD on average student and teacher outcomes in schools that have access to the intervention compared to those that do not. It is designed to meet What Works

Clearinghouse standards with procedures in place to minimize attrition, ensure baseline equivalence and use reliable and valid outcome measures that are not over-aligned with the intervention, and are collected in the same manner for both intervention and comparison groups. A sample of 50 schools serving middle school students will be recruited from districts in Texas, Illinois, Michigan, and New York. Half of these schools will be randomly assigned to a treatment group that will be given access to the RAAD intervention during the 2016-17 and 2017-18 school years, while half of the schools will be randomly assigned to a control group that does not have access to the intervention during this period. Control schools will be offered five days of RAAD professional development in summer 2018, after the study has been completed. IMPAQ International, the partner responsible for conducting the random assignment and collecting the data, has conducted randomized evaluations of RA using similar designs, achieving zero school level attrition in the impact analyses.

The goal of the impact evaluation is to identify the effects of RAAD on student and teacher outcomes at the end of the 8th grade. Therefore, within each school, the impact evaluation will focus on a subset of participating grade 8 ELA, science, and social studies teachers at each school. The focus on 8th grade allows us to assess the impact of RAAD in a crucial year for preparing students to transition to high school and in a grade commonly assessed through state standardized tests in ELA and science. Moreover, as 7th grade teachers will participate in the intervention, though not the evaluation, 8th grade impacts from the second year implementation will reflect cumulative effects of having exposed most students to RAAD across multiple subjects in the 7th and 8th grades.

Teachers who are willing to participate in the intervention and the evaluation will be identified prior to random assignment, and researchers will randomly select 2 classes per teacher

per year to follow for data collection and analysis. Program impact estimates will be calculated by comparing average outcomes among this sample at the treatment schools to average outcomes among the parallel sample of teachers and students in the control schools. In particular, impact estimates will be based on a multi-level model estimating average outcomes as a function of both school and student level variables, with a dichotomous school level treatment indicator identifying whether or not each school is in the treatment or control group. Table 4 outlines the data collection timeline for the impact study.

TABLE 4: Evaluation and Data Collection Timeline²

	Summer 2016	Sept 2016-Aug 2017	Sept 2017-Aug 2018
Treatment	2016 Summer Institute	Year 1 implementation On-line PD Winter Institute	Year 2 implementation On-line PD
Control	Business as usual	Business as usual	2018 Summer Institute
Evaluation Activities	Collection of teacher attendance data at professional development summer institute	<ul style="list-style-type: none"> • 2 teacher focus groups at each winter PD session • Collection of PD attendance data • 3 teacher surveys (Sept, Feb, May) • Student survey (end of year) • Student DRP test (end of year) 	<ul style="list-style-type: none"> • Collection of PD attendance data • 3 teacher surveys (Sept, Feb, May) • Student survey (end of year) • Student DRP test (end of year) • Collect state ELA and science test data

Student outcomes. The primary confirmatory impact questions for this evaluation focus on the impact of RAAD on 8th grade student literacy in years 1 and 2 of program implementation. Student literacy will be assessed using the Degrees of Reading Power (DRP)

² The timing of the grant period does not allow for complete student data collection and analysis from schools in their second year of implementation because the grant ends two months after the end of the school year, before state test scores are available. Further, the grant period is not long enough to allow for a complete cycle delayed treatment of the control schools. We have designed the delayed treatment to provide all 5 days of face to face PD in the last summer of the grant. A delayed start would allow evaluators to collect and analyze state test data for participating schools and to provide some online PLCs for the wait listed control group. An additional year would allow evaluators to collect state test data on participating 8th grade students after they transition into high school and to measure the impact of local capacity building on the spread of RA in school communities.

assessment in the spring of each year of implementation. The DRP provides both criterion- and norm-referenced measures of reading comprehension (see below).

The impact evaluation will also assess the impact of RAAD on science and ELA outcomes among 8th grade students. Each of the participating districts administers state science and ELA assessments at the end of the 8th grade (social studies is not typically assessed). Student performance on these assessments in each implementation year will be the basis of the estimated RAAD impacts on STEM and ELA achievement. We will use the meta-analytic approach described in May and colleagues (2009) and Somers, Zhu, and Wong (2011) to combine results across states in order to take into account differences in scoring on the tests. In effect, student scores on these tests will be translated into “z-scores” that represent each student’s position in the distribution of achievement within their state.

The analysis will also examine program effects on student attitudes, behaviors, and dispositions that are hypothesized to mediate the RA program impacts (see Figure 1, p. 15). This includes attitudes about the malleability of ability (i.e., “growth mindset”) and the payoff to effort, as well as student reports of positive academic behaviors. Previous research (Farrington et al., 2012, Farrington et al., 2012, West, et al. 2014) indicates that these self-reported academic behaviors, as well as attitudes about intelligence and the value of effort, are significant predictors of academic success. They are also key targets of the RAAD intervention. The analysis will also examine program impacts on students’ reported reading strategies. Measures of these outcomes will be based on valid and reliable survey scales (see below p. 43) and will be collected via online surveys in the spring of the first and second years of implementation.

Teacher effectiveness. Another important goal of the evaluation is to examine the effect of RAAD on “teacher effectiveness.” The evaluation will operationalize “teacher effectiveness”

using several different outcomes and will use the school level RCT design described above to examine the impact of RAAD on each. One of the key teacher effectiveness outcomes will be the reported implementation of RA instructional practices. The RAAD logic model (Figure 1, p. 15) hypothesizes that these practices are associated with improved student literacy outcomes, and several previous studies have shown that RA has positive effects on student literacy. Therefore, one potential definition of teacher quality is the extent to which teachers implement these practices. The impact evaluation will estimate RAAD effects on teacher reports of the frequency with which they employ instructional practices identified in the RAAD logic model.

It is possible that teacher responses could be affected by socially acceptable response bias, artificially inflating the extent to which teachers report implementing RAAD practices. In order to gauge the presence of this bias, we will use student survey responses on a parallel set of questions in order to identify the extent to which student reports of classroom instructional match teacher reports of those same activities. We will also examine two other dimensions of teacher effectiveness: 1) measures of effectiveness used for the district's local evaluation system, and 2) value-added scores based on the DRP. Each is described next.

Local district teacher effectiveness ratings. Each participating jurisdiction calculates teacher effectiveness ratings based on observations of teacher practice; two of the participating districts calculate ratings based on the well known Danielson framework (Danielson, 2011). Within each jurisdiction, the evaluation team will obtain component scores and summative observation scores for each participating teacher. In order to account for local variation in scoring as well as differences in the metrics used in each jurisdiction, the research team will norm these scores within each site (i.e., subtracting the local mean and dividing by the local standard deviation) so that the normed score will represent each teachers position in the local

distribution of teacher effectiveness as defined by the local observation measures. In addition, the evaluation team will assess the number of teachers deemed “effective” by their local evaluation system.

DRP value-added scores. In addition to reported RA practices and local evaluation ratings, the evaluation will also assess the impact on teacher value added to their students DRP scores. The evaluation team will estimate a multi-level model predicting student DRP scores, controlling for individual student characteristics, including prior year’s achievement (using state ELA tests), school level demographic characteristics, and individual teacher fixed effects. The coefficients associated with the teacher fixed effects will represent each teachers’ contribution to their students DRP, over and above the measured effects of student and school characteristics on achievement.

Setting. Consistent with the goals of the intervention, we plan to conduct the evaluation at schools where a sizable student population is performing poorly in reading, as measured by the state standardized tests. We will also focus recruitment on urban and semi-urban districts serving a concentration of students who are economically disadvantaged, African American, Hispanic, or English learners. The evaluation will take place in regular public middle schools where the intervention is being offered. Participating schools must serve 7th and 8th graders during the study period, and will exclude charter, magnet, and other specialized schools and programs. Table 5 summarizes the characteristics of the participating sites within districts.

TABLE 5: Demographic Data of District Sites / Middle School Subsets

	Chicago (Net. 11) PS, IL	Dearborn PS, MI	Holt PS, MI	Lansing SD, MI	NYC PS, NY	PSJA ISD, TX
No. of MS	30	6	4	5	87	8
Average % FRPL	86%	63%	44%	63%	75%	90%
Average % African American	39%	5%	11%	47%	35%	>1%
Average % Hispanic	44%	3%	14%	16%	42%	99%
Average % ELL	17%	50%	8%	14%	14%	41%
Average % reading proficient	60% (NWEA MAP)	70% (MEAP)	71.6% (NAEP)	43% (MEAP)	25% (NAEP)	65% (STARR)

Sample Size. While the intervention will be offered to all interested teachers in the study schools, the evaluation will target only those teachers who are teaching regular 8th grade classes in ELA, science, and social studies, have an intention to continue teaching at the study school during the two-year intervention period, and express a willingness to participate in the study prior to random assignment (“study-eligible” teachers). We expect our sample will include, on average, four teachers per school totaling 200 teachers across 50 schools. We will identify the student sample by randomly sampling two regular Grade 8 classes taught by each study teacher, in each year of the study (e.g., two separate cohorts of students). Teachers in the study stay consistent from year 1 to year 2. Students in the study include two different cohorts: those in study teachers’ 8th grade classes in year 1 and a new group of students in teachers’ 8th grade classes in year 2. Assuming an average class size of 25 and that there will be an overlap of approximately 25 percent of students across participating teachers in a given school, we expect that our sample to include an average of 150 unique students per school, for a total of 7,500

students across 50 schools in each of the first and second year samples. To reduce attrition, all participating teachers will be offered incentives for participating in the professional development and data collection. In addition, the evaluation team will mitigate attrition and improve engagement in the study through regular communication with schools and participants and by providing support and assistance with data collection efforts (e.g., assisting with scheduling, providing proctors, etc.) as needed. The evaluation team has been successful using such methods and experienced no school-level attrition for the current i3 validation study of RA and acceptably high student and teacher response rates with no significant differential attrition between treatment and control groups.

Minimum Detectable Effects. As mentioned earlier, the analysis will provide regression-adjusted estimates of impacts using both individual- and school-level covariates. To improve the precision of our impact estimates, we will randomize schools into treatment and control conditions within blocks based on state and school characteristics (such as percent receiving free lunch, achievement test scores, and racial/ethnic makeup of the schools). Blocking will also help ensure the schools are equivalent at baseline. Based on this estimation approach, we calculated the MDES for this study using Optimal Design 3.1, assuming the statistical power of 0.8, a 5 percent significance on a two-tailed test, an intraclass correlation of 0.05, and that the proportion of the outcome variation explained by school-level covariates is 0.5 (See Appendix E.8).

Based on these assumptions, the minimum detectable effect sizes are 0.1 standard deviations for student outcomes and 0.4 standard deviations for teacher outcomes. Previous randomized trials of Reading Apprenticeship have found student level literacy achievement effects of approximately .2 to .3 standard deviations (with even larger effects for certain subgroups), as well as teacher practice effects of ranging from .51 to 1.6 standard deviations

(Greenleaf et al., 2009, 2011). The estimated MDES for this evaluation are sufficiently small to suggest that the impact analysis will detect policy relevant effects should they exist.

Data Sources

DRP reading assessment. The Degrees of Reading Power (DRP) test provides a criterion- and norm-referenced measure of how closely and deeply students read and comprehend informational texts at different levels of text complexity. Each DRP test consists of nonfiction passages with embedded probes to determine how well students understand the surrounding text. The reading task of each DRP test item assesses the development of close reading skills and requires thought and analysis. The DRP is aligned to the Common Core State Standards, and has been shown to be reliable³ and a strong predictor of student achievement on CCSS aligned tests (Dreyfus, undated; Koslin, Zeno & Koslin, 1987) indicating strong construct validity. The test will be administered online to students at the end of year 1 and year 2 of program implementation.

Student survey. An online student survey administered in spring of the first and second years of implementation will target the mediating student outcomes for which we expect RA to have a positive effect (see logic model). To measure these outcomes, we will use validated and reliable survey scales from several sources: the Becoming Effective Learners Student Survey (BELS-S) developed by the Consortium on Chicago School Research (CCSR), the Metacognitive Awareness of Reading Strategies Inventory, and the RA Opportunity to Learn Survey. The BELS-S measures student-level social-emotional learning outcomes including the academic mindsets and learning strategies targeted by RA, as well as classroom context and school-wide characteristics (Farrington et al., 2012). The Metacognitive Awareness of Reading

³ Alternate form test-retest reliability ranged from $r=.86$ to $.91$. Kuder-Richardson (KR-20) ranged from $.93$ to $.97$ indicating a high degree of internal consistency (Koslin, Zeno & Koslin, 1987)

Strategies Inventory contextualizes academic mindsets and learning strategies in relation to reading. It measures students' use of global (e.g., having a purpose in mind when reading and previewing text), problem solving (e.g., rereading text, picturing or visualizing information) and support reading strategies (e.g., annotating text).

The RA Opportunity to Learn Survey measures students' perceptions of how literacy was integrated in science classes and of their own confidence and identity (Greenleaf et al., 2011a, 2011b). The survey developed from these sources will take no more than a class period to complete. In prior studies, we have achieved response rates of 80 percent and higher through regular follow up with and incentives for survey administrators (typically classroom teachers). We have budgeted for similar incentives in this study.

Student records data. To determine program effects on attendance and achievement on standardized tests, IMPAQ will collect individual-level longitudinal data from the participating school districts for all students in treatment and control classrooms. We will collect data on gender, race or ethnicity, and special education and English language learner status, as well as on student achievement and behavior variables including attendance, and state standardized test scores in ELA and science (state standardized social studies tests are typically not administered to eighth graders).

Teacher survey. Administered six times, in September, January, and April of both implementation years, the online teacher surveys will measure fidelity of program implementation and assess differences between the practices of treatment and control teachers. Collecting six surveys from each teacher will allow us to collect log-like practice data, taking numerous snapshots of classroom practices. More frequent surveys are less vulnerable to teacher

recall errors or to idiosyncratic practices than a single survey would be (Rowan & Correnti, 2009).

We will adapt items from a survey administered in an i3-funded study of RA in high school that successfully distinguished treatment and control teacher practices. This survey asks teachers about the frequency with which they employ instructional practices identified in the logic model as key indicators of implementation including student reading opportunities, collaboration, fostering metacognitive inquiry, and providing instruction, modeling and time to practice comprehension strategies. It also includes items on implementation challenges and supports that will help to improve the scaling up RA to other districts and schools. The survey scales have internal reliabilities ranging from .60 to .94, with most scales at .70 or above.

In addition, we will adapt items from CCSR's teacher survey (currently undergoing reliability and validity testing) related to teacher beliefs and instructional practices that support the social-emotional development of students. The survey we develop from these sources will take approximately 20 minutes to complete. In prior studies we have achieved response rates of 90 percent and higher through regular follow up and respondent incentives.

Local district teacher effectiveness ratings. From each of the participating districts, we will obtain teacher effectiveness scores based on observations from their locally administered evaluation system. We will norm the scores across districts for analysis as described earlier.

RAAD Implementation Study

Program Fidelity. The evaluation will study the implementation of RAAD within the impact study for three reasons: 1) to verify the extent to which RA is implemented as planned by its developers, 2) to describe the treatment/control contrast (we will collect the same quantitative information from treatment and control schools regarding teaching practices and other measures

relevant to RA), and 3) to explore the barriers and facilitators to implementation and provide that feedback to SLI on an ongoing basis so that they can provide midcourse corrections as needed. Quantitative ratings of fidelity will be supplemented by qualitative data from teacher focus groups. These data will shed light on the circumstances under which RA can foster improved student and teacher outcomes and on why the approach works or does not.

Fidelity of Implementation Measures

Delivery of PD. Through review of professional development session agendas, the external evaluators will determine if the professional development was delivered as planned in terms of the number of contact hours, the delivery mechanism (in person versus virtual), and the content covered (e.g., integrating reading comprehension and use of metacognitive conversations into daily instructional practices). The program will achieve fidelity of implementation if all 42 hours of face-to-face and 12 hours of virtual professional are delivered, and if all of the content identified in the theory of action are covered through either face to face or online professional development.

Review of PD agendas. To determine whether the professional development was delivered as intended, the research team will review agendas for all sessions offered (both in person and virtual). We will compare the agenda's with the RA framework specified earlier in the application to determine the extent to which each of the key components of the framework were covered. Fidelity of implementation will be achieved if the agenda's indicated that all aspects of the framework are covered.

PD Attendance Thresholds. In previous studies, SLI has determined that for fidelity of implementation to have been met, teachers must attend at least 90% of in-person professional development and participate in 75% of teacher leader meetings. Using attendance records

collected we will determine if teachers in the study have met these thresholds. To achieve fidelity of implementation at the school level, 75% of the study teachers in the school must meet these thresholds.

PD Attendance. Teacher participation in the professional development sessions will be measured through collection of sign in sheets for the in-person sessions, and electronic records of individuals attending the virtual events.

Implementation of RA Instructional Framework

Teacher Surveys. Using data from the multiple teacher surveys completed by treatment and control teachers, the external evaluators will assess the extent to which RAAD teachers have implemented the framework in their classrooms. The RAAD teachers' practice will be compared with control teachers to describe the treatment/control contrast. In addition, prior studies of RA will provide guidance to WestEd and IMPAQ in developing thresholds of practice to determine if the framework has been implemented with fidelity. Following the standards set for attendance, fidelity of implementation will be achieved if 75% of study teachers have met this threshold.

Teacher focus groups at PD sessions (treatment only). IMPAQ staff will attend each of the winter in person professional development sessions to conduct focus groups. The focus groups will allow the researchers to explore issues related to whether and why the intervention is or is not being implemented faithfully, as well as issues related to the efficacy of on-line versus face-to-face professional development.

Formative Assessment of Capacity Building

The RAAD project invests in building the capacity of local partners, school site administrators, and teacher leaders to support ongoing RA implementation by participating teachers, as well as to develop literacy leadership for dissemination at the school level. Working with local partners, SLI will document and assess the influence of these aspects of the proposal

to gauge their success and inform program improvement. The formative assessment and capacity building work will draw on the data collected by IMPAQ as part of the implementation study, as well as on data collected directly by WestEd SLI staff solely for the purposes of formative assessment and capacity building. Formative data will be fed back into the design and implementation of project activities through quarterly meetings among SLI design staff and regional partners.

Data Sources

Documentation. Documentation protocols will be developed by SLI research staff, with data collected by local partners and teacher leaders. Documentation data will include participant feedback sheets, agendas, and artifacts from all PLCs and team meetings at the school site. These will be used to gauge the extent to which teacher leaders and administrators participate in planned RAAD activities, how often team meetings occur at school sites, and who is involved in these PLCs and team meetings. In addition, examination of documentation will allow SLI staff to see how well the content of PLCs and team meetings reflect recommended implementation support strategies and how their content changes, if at all, over time.

Observations. Local partners and SLI staff will observe a subset of PLCs and team meetings in the four partner states using field notes to document their observations.

Surveys of Teacher Leaders and Administrators. SLI will survey teacher leaders and administrators once a year, using a survey developed for one of the current i3 grant (RAISE). These surveys will be used to determine to what extent do teacher leaders and administrators feel prepared to engage their broader school communities in learning about and taking up effective literacy practices. In addition, survey questions will ask what changes, if any, occur in their conceptions and practices regarding academic literacy instruction as they participate in RAAD.

Teacher Leader Focus Groups. SLI research staff will convene focus groups of teacher leaders in person or through online video conferencing at one network meeting in each of the four states in years 2 and 3 of the project to gather their feedback on the process of leadership development. These focus groups will examine the degree to which teacher leaders and administrators feel prepared to support ongoing implementation of effective literacy strategies in their sites, including any barriers or challenges they face. In addition, the focus groups will investigate how local partners and SLI can better support their ongoing work. To what extent do local partners effectively support ongoing RA implementation at school sites? What additional support might they need?

Partner Interviews. SLI research staff will carry out phone interviews with local partners quarterly to identify challenges and explore support needed for ongoing implementation at the school sites. In particular, interviews will focus on the following questions: What RAAD resources do local partners find supportive in carrying out their work? What barriers or challenges do local partners encounter? And how can SLI better support their work?

Alignment of Evaluation to Project Goals and Objectives

Table 6 below displays the goals and objectives of RAAD aligned to the measures we will collect and analyze, for formative improvement and summative evaluation of the project.

CONCLUSION

If funded, this SEED proposal will help achieve the shared aims of WestEd and the U.S. Department of Education by increasing the number of highly effective teachers as a means to improve student learning, achievement and academic dispositions. We will set the stage for continual improvement by building local capacity and programmatic coherence to support teacher learning and collaboration centered on effective literacy instruction and learning.

TABLE 6 Goals, Measures and Objectives for RAAD

<p>Goal 1: Increase the number of highly effective middle and high school teachers serving high needs students by engaging 2000 teachers in Reading Apprenticeship professional learning; approximately 20% of these will be STEM teachers. (<i>Absolute Priority 3; Competitive Preferences 2, 3 & 4</i>)</p>	
Objectives	Measures, Documentation, Targets
<p><u>Objective 1:</u> Recruit 2,000 secondary school teachers for engagement in professional development and school level improvement in teaching and learning</p>	<ul style="list-style-type: none"> ● Recruitment plans & materials ● Teacher applications & commitment forms ● School demographics reports
<p><u>Objective 2:</u> Provide Reading Apprenticeship professional development and support for implementation for 2000 teachers</p>	<ul style="list-style-type: none"> ● PD agendas ● PD observations ● Attendance data
<p><u>Objective 3:</u> Provide follow-up support for high-quality implementation through online professional learning communities</p>	<ul style="list-style-type: none"> ● PLC attendance data ● PLC agendas and materials ● Teacher focus groups ● Teacher PLC feedback sheets ● PLC observations
<p>GOAL 2: Improve high needs middle and high school students’ reading comprehension, academic achievement, metacognitive skills and positive learning dispositions by increasing opportunities to learn. (<i>Absolute Priority 1; Competitive Preference 1; Competitive Preference 4</i>)</p>	
<p><u>Objective 1:</u> Teachers provide effective instruction for discipline-specific reading comprehension by implementing RA routines</p>	<ul style="list-style-type: none"> ● Teacher & Student Surveys ● PLC observations ● Focus groups ● DRP tests ● State ELA and science test scores ● Local teacher effectiveness ratings
<p><u>Objective 2:</u> Teachers provide effective support for development of students’ learning dispositions, self-efficacy and confidence in their literacy abilities</p>	
<p>GOAL 3: Build local capacity for strong and sustained implementation of effective academic literacy practices through school and regional network support (<i>Absolute Priority 3; Competitive Preference 2</i>)</p>	
<p><u>Objective 1:</u> Build local partners’ capacity to support and sustain RA implementation</p>	<ul style="list-style-type: none"> ● Meeting agendas & minutes ● PD and PLC Attendance ● Interviews & focus groups with teacher leaders and local partners
<p><u>Objective 2:</u> Local partners build capacity of teacher leader and site administrators for school wide literacy improvement</p>	<ul style="list-style-type: none"> ● Interviews & focus groups with teacher leaders and administrators ● Quarterly meeting agendas and attendance data ● TL and school team agendas, artifacts ● TL and administrator surveys & interviews
<p><u>Objective 3:</u> Develop and maintain cross-national network with local partners and SLI</p>	<ul style="list-style-type: none"> ● Meeting agendas & minutes ● Focus groups and interviews with local partners