

## Reading Apprenticeship for Academic Literacy Learning (RA4ALL)

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WestEd, in partnership with the Center for the Collaborative Classroom (CCC) and SRI International, proposes a Mid-phase project to refine and scale Reading Apprenticeship for Academic Literacy (RAAL). RAAL, a curriculum supported with professional learning (PL), is designed to accelerate reading growth and academic achievement of 8<sup>th</sup> and 9<sup>th</sup> grade students who read below grade level. During the project, we will reach approximately 6,750 developing adolescent readers from 50 schools in five states. RAAL fosters student engagement and involves students in disciplinary literacy learning while strengthening their foundational reading skills with integrated materials — CCC’s *Systematic Instruction in Phonological Awareness, Phonics, and Sight Words (SIPPS®)*. Our project “RA4ALL” is supported by moderate evidence (**Absolute Priority 1**) and is a field-initiated intervention (**Absolute Priority 2**).

#### **A. SIGNIFICANCE**

In 2022, 8<sup>th</sup> grade NAEP reading scores declined nationally by three scale points, a statistically significant decrease when compared with 2019 scores. Results showed that fully **30% of U.S. 8<sup>th</sup> grade students** performed at the below basic performance level (NCES, 2022). Additionally, 2023 NWEA data shows that academic recovery stalled in 2022-23, that significant achievement gaps persist, and that the average 7<sup>th</sup> grade student will need the equivalent of 5.9 additional months of schooling to catch up in reading. These declines reflect both long-term trends and the continuing academic impacts of disruptions to students’ learning during the COVID-19 pandemic (Lewis and Kuhfeld, 2023).

The NAEP declines are significant because students must be able to tackle college and career literacy demands as the value of education in today’s knowledge economy grows (NCSL, 2016). Indeed, 9<sup>th</sup> grade outcomes predict high school dropout (Neild, Stoner-Eby, Furstenberg, 2008) and reading is a lever for improving students’ graduation rates and life trajectories (Hernandez, 2011). High school graduation results in higher wages and employment rates and better health (Bridgeland, DiIulio & Morison, 2006), and graduates contribute more to the economy and are less likely to need social services, saving taxpayers billions each year (Burrus & Roberts, 2012).

To successfully navigate high school literacy demands, readers in middle school need to unpack information representations, discourse and language structures, and vocabulary that are unique to each discipline (Shanahan & Shanahan, 2012). But below grade-level readers do not *yet* have the skills to comprehend complex, discipline-specific texts (e.g., primary sources, scientific models and data displays). For 8<sup>th</sup> graders who score below basic in reading (NCES, 2022) and who are more likely to exhibit poor foundational skills (White, Sabatini, & White, 2021), success requires immediate intervention. Interventions therefore must simultaneously target higher-order, discipline-specific reading skills and scaffold the foundational skills.

Because mastering foundational skills by third grade is so important, many intervention programs and state policies focus on early elementary literacy (Denton et al., 2022). Given the current state of adolescent reading, intervention resources focused on adolescent literacy are just as critical. A small number of adolescent intervention programs have demonstrated success with basic reading and comprehension skills (Kim et al., 2016; WWC, 2016, 2021). However, these interventions focus on generic reading strategies and do not prioritize disciplinary literacy — specialized knowledge and skills used within each discipline — or address student motivation and engagement which are also crucial for raising adolescent achievement (National Academies, 2018). Without opportunities to engage with grade-level, discipline-specific texts and concepts, developing adolescent readers fall further behind (TNTP, 2018).

### [Reading Apprenticeship for Academic Literacy \(RAAL\): A Proven, Disciplinary Approach](#)

This project tackles intertwined components of the adolescent literacy challenge: engaging 8<sup>th</sup> and 9<sup>th</sup> grade students in disciplinary literacy while also addressing foundational reading instruction. It expands the use of the evidence-based RAAL curriculum and incorporates additional foundational skills instruction for students with demonstrated needs by integrating *SIPPS*® — designed for adolescent learners (Appendix J.1). Our approach is distinct from existing approaches because it focuses on both high-level disciplinary reading comprehension

practices necessary for secondary success and foundational skills for which older students now need more support.

**RAAL Course.** Consistent with *Providing Reading Interventions of Students in Grades 4-9* (Vaughn, et al., 2022), RAAL incorporates a set of comprehension-building practices to help students make sense of text, providing access to discipline-specific texts that stretch students' reading comprehension. RAAL has received recognition for its effectiveness by field leaders (Deshler, Palincsar, Biancarosa, & Nair, 2007; Lee & Spratley, 2010; Snow, Griffin, & Burns, 2005) because it improves students' academic dispositions and prioritizes disciplinary literacy. Through RAAL, students develop the skills to break the codes of academic language across the disciplines and the perseverance to do so. In line with research demonstrating that individuals tend to engage in activities in which they feel confident of success (CASEL, 2015), RAAL builds students' stamina, confidence, high-level literacy skills and critical thinking.

RAAL includes three units: *Reading Self and Society*, *Reading History*, and *Reading Science*. Each unit includes lesson plans, text sets, student interactive notebooks, and curriculum-embedded reading assessments (Appendix J.2. Learning Goals; J.3. Sample Lesson; J.4. Reading Assessment). RAAL's design addresses three obstacles to 8<sup>th</sup> and 9<sup>th</sup> grade reading achievement: issues with **classroom climate**, limited access to **relevant, disciplinary texts**, and limited text talk via **peer collaboration** (Guthrie, Wigfield, & You, 2012).

RAAL builds positive **classroom climates** by establishing community norms that encourage students to support each other in taking risks and investigating personal reading histories. Units include **relevant, disciplinary texts** to support developing readers who may view themselves as less competent (Wolters et al, 2014). For example, students read about how education impacts future earnings and are taught to ask questions of the texts to support comprehension. They also practice metacognitive strategies through the "talking to the text" routine while reading primary sources, such as the First Amendment and related court cases addressing its interpretation.

Finally, RAAL includes frequent **peer collaboration**, a research-grounded practice (Vaughn, Klingner, & Bryant, 2001). RAAL students engage with peers to generate genre-specific and

discipline-specific reading strategies lists and compare their metacognitive reading logs, a departure from curriculum based on generic reading comprehension questions.

***SIPPS Integration.*** Given the high percentage of students reading below basic on the 2022 NAEP, more 8<sup>th</sup> and 9<sup>th</sup> grade students need support in learning foundational skills. Consistent with the recommendations in *Providing Reading Interventions of Students in Grades 4-9* (Vaughn et al., 2022), all students participating in the project will take the *SIPPS* placement test. Based on results, students with similar decoding needs will receive appropriate, differentiated foundational skills instruction while in the RAAL course. *SIPPS* includes two levels designed for intervention instruction for students in grades 4–12: *SIPPS* Plus, which **includes** alphabetic and spelling-pattern skills, and *SIPPS* Challenge which addresses complex, multisyllabic decoding.

### Potential for Impact and Contributions to the Field

RA4ALL has the potential for significant impact on adolescents' literacy and academic outcomes because it combines two successful interventions to meet the changing needs of secondary teachers and students. A prior randomized trial (10 districts and 34 schools) assessed RAAL's impact (Sommers et al., 2010) and met WWC standards without reservations (WWC, 2022). Ninth graders who scored 1-5 years below grade level on the GRADE reading test participated. Results showed that RAAL improved students' reading comprehension by 63% above what they would have achieved without the course. RAAL had positive, statistically significant impacts on state test scores in English Language Arts (ELA) (effect size = 0.15) and science (effect size = 0.14), GPA (effect size = 0.07), and course credits needed to graduate (effect size = 0.06) (Somers et al., 2010).

The integration of RAAL with *SIPPS* aligns our project to the recommendations in *Providing Reading Interventions of Students in Grades 4-9* (Vaughn et al., 2022). *SIPPS* addresses Recommendation 1 which finds strong evidence for building students' decoding skills so they can read the multisyllabic words, characteristic of complex, disciplinary texts. Effect sizes for Recommendation 1 are 0.13 for general reading proficiency and 0.09 for reading comprehension.

RAAL addresses Recommendation 3, which is supported by strong evidence and shows an overall effect size of 0.13 on general reading proficiency and 0.10 on reading comprehension. RAAL builds students' word and background knowledge. It engages students in asking and answering questions, summarizing, and monitoring their comprehension. Because the supporting studies included 8<sup>th</sup> or 9<sup>th</sup> graders, the strong alignment of our intervention with the Practice Guide recommendations suggests that RAAL can positively impact both 8<sup>th</sup> and 9<sup>th</sup> graders.

Beyond immediate teacher and student impacts, this project will provide insights about engaging developing adolescent readers in rigorous, discipline-specific learning while improving their literacy skills. WestEd and partners will build on their strong track records publishing results and expanding the use of effective professional learning and curriculum.

## **B. STRATEGY TO SCALE AND MANAGEMENT PLAN**

### **B1. Barriers to Scale**

This project addresses four barriers that have prevented the scaling of RAAL in recent years.

**Barrier 1. RAAL includes outdated content.** RAAL's last significant content update was in 2013, and new scholarship from the field of adolescent literacy and feedback from current users of RAAL have given us strong guidance for improvement. For example, the *Reading Self and Society* unit engages students in reading both literary and non-fiction texts, including statistical information from pre-2010 about the value of earning a high school diploma and completing postsecondary education. Updated evidence would strengthen relevance. Similarly, the *Reading Science* unit's culminating activity engages students in writing a persuasive essay. State science standards now ask students to write scientific explanations and arguments about scientific phenomena, so we will update the unit's culminating assignment to reflect this emphasis.

**Barrier 2. RAAL includes too much content for a year-long course.** Current RAAL teachers frequently report teaching only one or two units during a year-long course. This limits the academic and disciplinary-literacy awareness that RAAL instantiates. Therefore, we will **prioritize and streamline content** to ensure that participating teachers and students learn to

articulate and use disciplinary practices to read, interpret, and write about texts (Spire, Kerkhoff, & Paul, 2019). As we streamline, we will focus on the highest leverage comprehension-building practices (Vaughn et al., 2022) and key disciplinary literacy practices (Shanahan & Shanahan, 2012). For example, the *Reading History* unit focuses on women's voting rights over two centuries. To streamline this unit, we will narrow the historical time period and focus on causal relationships and the contextualization of sources and events.

**Barrier 3. RAAL does not fully address foundational skills.** The students who will be served by this grant were in elementary school during the most intensive periods of emergency remote education and therefore may have missed out on key foundational skills instruction. To address this challenge, WestEd will collaborate with CCC to incorporate *SIPPS* into the RAAL scope and sequence which currently does not include a foundational skills focus. CCC's content experts will identify when and how to most effectively integrate both *SIPPS* assessments and teaching materials.

**Barrier 4. Beyond reading specialists, few middle and high school teachers have the knowledge and expertise to address reading skills gaps.** Relying only on reading specialists to teach RAAL simply will not meet the magnitude of the adolescent literacy challenge; other secondary teachers will need to be involved. Few secondary teachers receive training to teach literacy skills (Carney & Indrisano, 2013). In 2022, only half of all 8<sup>th</sup> grade teachers responding to the NAEP teacher survey reported being confident about addressing reading skill gaps faced by their students (NCES, 2022). Recent research suggests that well-designed instructional materials plus PL leads to stronger impacts for student learning outcomes (Cohen & Hill, 2008). Thus, in order to teach RAAL, middle and high school teachers will need support around how to teach both foundational skills and discipline-specific reading comprehension practices.

Therefore, WestEd will provide PL that supports teachers in implementing RAAL and *SIPPS* with fidelity (Exhibit 1). We will use existing, tested-at-scale Reading Apprenticeship PL as the basis for introducing teachers to RAAL. This PL draws on an experiential approach (Greenleaf,

et al., 2011; Schoenbach, Greenleaf & Murphy, 2016) that is designed to effectively build teachers’ capacity and confidence to implement RAAL’s literacy and learning routines (Greenleaf, et al., 2023). WestEd will collaborate with CCC to incorporate a focus on *SIPPS* into the PL. Classroom coaching will address both pedagogy and content.

WestEd will also offer PL for instructional coaches and administrators in order to build district and school capacity to **support and sustain** RAAL beyond the grant-funded period. We will include instructional coaches (i.e., staff who provide instructional support) in the teacher PL. Coaches will also participate in additional PL to deepen their understanding of the instructional practices embedded in RAAL and support effective classroom implementation. Administrators will participate in the existing, online “Reading Apprenticeship for Administrators” course which focuses on coherence, creating a literacy vision, change leadership, and measurement of change. We will add a fifth session focused on RAAL.

***Exhibit 1. RAAL Professional Learning Schedule***

| Professional Learning schedule | Implementation                                      | Support and Sustainability    |                             |
|--------------------------------|---|-------------------------------|-----------------------------|
|                                | Teachers*   | Instructional Coaches         | Administrators              |
| Introductory PL: Summer 1      | 3-day institute; RAAL Units 1&2; <i>SIPPS</i>       | 1 additional PL day           | Participate as possible     |
| Follow-up PL: School Year 1    | 1 PL day: RAAL Unit 3                               | 2 PL days (1 Fall & 1 Spring) | 5, two-hour online sessions |
| Coaching: School Year 1        | 2 PL days (Fall & Winter): (WestEd leads)           | Regular PLC meetings          | N/A                         |
| Follow-up PL: Summer 2         | 1 PL day: Analyzing Impact and Sustainability Plans | 1 additional PL day           | Participate as possible     |
| Coach PL: School Year 2        | N/A   | 2 PL days (1 Fall & 1 Spring) | Participate as possible     |
| Coaching: School Year 2        | District-coaches lead                               | Monthly online sessions       | N/A                         |

\* Instructional Coaches are expected to attend all Teacher PL under Implementation

**B2. Management Plan**

The main goal of RA4ALL — to refine and test RAAL so as to improve outcomes for students reading below grade level — will be achieved through iterative design and improvement processes that follow the plan outlined in Exhibit 2 and Appendix J.7. WestEd, CCC, and SRI



will partner to refine, evaluate, and scale RAAL. As the prime organization, WestEd, will lead the overall project; CCC will provide advice about RAAL’s refinement, design, and *SIPPS* integration, and will lead the RAAL curriculum dissemination; SRI will lead the evaluation.

*Exhibit 2. Abbreviated Management Plan (Appendix J.7 for full plan)*

| Activity and milestones                                    | Goal & Objective | Who               | 2024 Start |    | 2024-2025 Pilot |   |   |    | 2025-2026 Eval Y1 |   |   |    | 2026-2027 Eval Y2 |   |   |    | 2027-2028 Dissemination |   |   |    |
|--|------------------|-------------------|------------|----|-----------------|---|---|----|-------------------|---|---|----|-------------------|---|---|----|-------------------------|---|---|----|
|  |                  |                   | W          | Sp | Su              | F | W | Sp | Su                | F | W | Sp | Su                | F | W | Sp | Su                      | F | W | Sp |
| <b>Phase 1. RAAL Refinement</b>                            |                  |                   |            |    |                 |   |   |    |                   |   |   |    |                   |   |   |    |                         |   |   |    |
| Phase 1. RAAL Refinement                                   | 1.2              | WestEd, Districts | x          |    |                 |   |   |    |                   |   |   |    |                   |   |   |    |                         |   |   |    |
| Refine and test curriculum                                 | 1                | WestEd, CCC       | x          | x  | x               | x | x | x  |                   |   |   |    |                   |   |   |    |                         |   |   |    |
| <b>Milestone:</b> RAAL ready for Phase 2                   | 1.4              | WestEd, CCC       |            |    |                 |   |   | x  | x                 | x |   |    |                   |   |   |    |                         |   |   |    |
| <b>Phase 2 &amp; 3. RAAL Implementation</b>                |                  |                   |            |    |                 |   |   |    |                   |   |   |    |                   |   |   |    |                         |   |   |    |
| PL & Coaching (teacher, coach, admin)                      | 3.2, 4.3         | WestEd, Teachers  |            |    |                 |   |   |    | x                 | x | x | x  | x                 | x | x | x  | x                       |   |   |    |
| Teachers teach refined RAAL                                | 2, 3.3, 4        | Teachers          |            |    |                 |   |   |    |                   | x | x | x  |                   | x | x | x  |                         | x | x |    |
| <b>Milestone:</b> Coaching shifts to districts             | 3.3, 4.1         | WestEd, Districts |            |    |                 |   |   |    |                   |   |   |    |                   | x | x | x  |                         | x | x |    |
| <b>Phase 2. RCT</b>  |                  |                   |            |    |                 |   |   |    |                   |   |   |    |                   |   |   |    |                         |   |   |    |
| Recruit districts, schools, teachers                       | 2.1, 3.1         | WestEd, SRI       | x          | x  | x               | x | x |    |                   |   |   |    |                   |   |   |    |                         |   |   |    |
| <b>Milestone:</b> Randomization & MOUs                     | 2.1              | SRI               |            |    |                 |   |   | x  | x                 |   |   |    |                   |   |   |    |                         |   |   |    |
| Data collection & analysis (see Appendix J.7)              | 2.3, 3.3         | SRI               |            |    |                 |   |   |    | x                 | x | x | x  | x                 | x | x | x  |                         |   |   |    |
| <b>Phase 3. Sustainability, Scaling, and Dissemination</b> |                  |                   |            |    |                 |   |   |    |                   |   |   |    |                   |   |   |    |                         |   |   |    |
| Scale and sustainability study                             | 2, 3             | WestEd or SRI     |            |    |                 |   |   |    |                   |   |   |    |                   |   |   |    |                         | x | x |    |
| RAAL facilitator-in-training PL                            | 4.2              | WestEd            |            |    |                 |   |   |    |                   |   |   |    |                   | x | x | x  |                         | x | x |    |
| Dissemination  | 4                | WestEd, CCC, SRI  |            |    |                 |   |   |    |                   | x | x | x  | x                 | x | x | x  |                         | x | x |    |
| <b>F=Fall, Sp=Spring, Su=Summer, W=Winter</b>              |                  |                   |            |    |                 |   |   |    |                   |   |   |    |                   |   |   |    |                         |   |   |    |

The project has three phases. In **Phase 1**, WestEd and CCC will refine and pilot the RAAL course (January 2024 – May 2025). In **Phase 2**, SRI will evaluate the impact of the refined RAAL (June 2025 – May 2027). In **Phase 3**, WestEd and CCC will collaborate to disseminate RAAL and all three partners will publish results. WestEd will implement the project plan through a team structure led by key personnel whose roles, responsibilities and qualifications are noted in Exhibit 3. All teams use a shared project management software and meet weekly or monthly throughout the project.

The ***Project Leadership Team*** ( [REDACTED] ) will direct all aspects of the project, use data for program improvement, assess progress towards goals and objectives, communicate with all stakeholders, and meet regularly with CCC and SRI to ensure that partnership activities are on target.

The ***Curriculum and PL Design Team*** ( [REDACTED] ) will refine, test, and improve the curriculum and PL. During Phase 1, they will meet weekly to refine RAAL’s materials, scope and sequence as described in the barriers to scale section, integrate *SIPPS*, and plan PL. During Phase 2, this team will train facilitators, facilitate PL, and guide implementation of the RAAL course. During Phase 3, this team will continue Phase 2 roles, incorporating evaluation feedback.

***Evaluation and Improvement*** ( [REDACTED] ). During Phase 2, SRI staff will conduct the independent impact evaluation, coordinating with project leadership. They will assure that IRB processes are complete, align and implement formative and summative evaluation components, collect and interpret data, and report findings, collaborating with the leadership team to interpret findings and identify key areas of improvement during the project. WestEd will lead the Phase 1 usability and Phase 3 scale and sustainability studies described in Section D.

The ***Operations and Production Team*** ( [REDACTED] ) will ensure that materials are developed, produced, shipped to pilot teachers (Phase 1), and submitted to CCC on time (Phases 2 & 3), and that PL events are run smoothly and consistently.

**Advisory Support and Publication** ( [REDACTED] ). CCC will advise the design team throughout the project. During Phase 1, as we integrate *SIPPS* into RAAL, CCC will provide expert advice on curriculum design and content such as vocabulary development. During Phase 3, CCC will publish and market RAAL curriculum.

### **B3. Capacity to Scale RA4ALL**

**Organizational Resources and Stability:** As a project of WestEd, RA4ALL will draw on the seasoned infrastructure (human resources, finance, contracts, IT, and communications), and resources of a mature national organization. WestEd is a preeminent educational organization with over 1,000 employees committed to making a qualitative difference in the lives of youth, children, and adults. We conduct and apply research, develop evidence-based solutions, and provide consulting services across the country in both rural and urban communities to improve equitable outcomes for individuals from infancy through adulthood.

WestEd brings more than 50 years of experience providing high quality PL to school and district leaders, teachers, and other school personnel across all 50 states, Reading Apprenticeship has engaged more than 50,000 teachers in its 27-year history. To lead PL at scale, the RA4ALL leadership team works closely with experienced facilitator and content expert pools that include 90 teachers and faculty from across the country. This capacity – and knowledge of multiple state and district contexts – positions us to successfully scale RAAL. The team employs a rigorous, design-based research process to develop discipline specific curriculum materials that integrate evidence-based literacy practices. Most recently this has included the development of text-rich argumentation units in history, literature, and science (Cribb, Maglio, & Greenleaf, 2018; Goldman et al., 2019; Greenleaf, et al., 2023a).

CCC is a mission driven, nonprofit organization with over 120 full time staff along with 90 contractors who serve over 1,000 school districts each year. CCC has a robust program development team who conceptualize and produce literacy and social-emotional learning programs for school districts across the United States and Latin America. Its evidence-based

programs help children develop as proficient readers and writers, appreciate the ideas and opinions of others, learn to agree and disagree respectfully, think critically about big ideas, and become responsible citizens of the world. as well as its emphasis on integrating social emotional learning with literacy development. RAAL complements CCC’s existing products by adding curriculum materials that support adolescent learners. CCC has partnered with WestEd’s RA team on previous initiatives. CCC has reached more than 8 million students and 328,000 teachers in classrooms across the country since its founding in 1980.

**The Project Team.** The team has many years of experience working with teachers, leaders, and researchers across the nation. Our team includes experts in literacy, curriculum design, staff development, and evaluation; we have strong track records of bringing interventions to scale and sustaining them by working in partnership with regional and local education leaders. We have conducted qualitative and quantitative research, including case studies and large randomized controlled trials, and furthered the adolescent literacy field through publishing. Our qualifications and roles are in Exhibit 3 (Appendix B. Resumes; Appendix J.5. Org. Chart).

*Exhibit 3. WestEd, CCC, and SRI Key Personnel: Roles, Responsibilities, and Qualifications*

| Person, Role   | Responsibilities and Qualifications  |
|--|--|
| <p>██████████<br/> <i>Project Director</i><br/> <i>WestEd</i></p>        | <p>██████████ will provide leadership for the project, meeting regularly with the leadership and evaluation teams. She will manage the collaboration with CCC and the evaluation team and oversee grant reporting. Over 30 years, she has led seven federal i3, EIR and SEED grants focused on literacy and PL, and has experience leading cross-organizational partnerships. She currently leads an EIR grant (Accelerating Literacy through Self -Regulation, Collaboration, and Persistence: <u>S411B200016</u>), the development of a PL toolkit focused on secondary writing, and the evaluation of Colorado’s READ Act. ██████████ holds a PhD from Stanford University School of Education in Administration and Policy Analysis.</p> |
| <p>██████████, MA<br/> <i>Co-Project Director</i><br/> <i>WestEd</i></p> | <p>██████████ will manage project implementation, communications, and dissemination, holding responsibility for leadership team agendas and oversight of key contractors. ██████████ has served as Reading Apprenticeship Associate Director since 2012. She developed and managed i3, EIR, and SEED projects that brought RA to 15 states. She has 30+ years of experience in management, teaching, and evaluation.</p>   |

|   |   |
|---|---|
| <p>██████████<br/> Curriculum,<br/> Capacity, and<br/> PL Design<br/> Leads<br/> WestEd</p>                   | <p>██████████ will lead curriculum refinement, the pilot usability study, and the scale-up study. She currently works on SEED grants and the IES Secondary Writing Toolkit, which include sample lesson sequences. She led the development of Using College-Level Argumentation to Improve Multiple Source Writing (UCLAIMS), a history teacher PL program, and holds a PhD in Education from UC Irvine.</p> <p>██████████ will lead PL design and facilitator management. She has managed PL design and District Partnerships since 2012. She has extensive experience designing and leading PL, she facilitated a science inquiry design network that resulted in the publication of text-rich, OER science-inquiry units, and she managed an i3 grant.</p>   |
| <p>██████████,<br/> Project<br/> Manager and<br/> Finance<br/> Director<br/> WestEd</p>                       | <p>██████████ will manage project planning, recruitment, and contracts. She will also oversee the Operations Team to assure the project materials and PL are produced within budget and on time. ██████████ has been a Sr. Financial Analyst and Program Manager since 2011 and has overseen the Operations Team for Literacy for many years. She successfully managed large federal projects and extensive district contracts.</p>   |
| <p>██████████<br/> -<br/> <b>Publication</b><br/> Center for<br/> Collaborative<br/> Classroom<br/> (CCC)</p> | <p>██████████ President and CEO of CCC will lead the RAAL materials publication in Phase 3. In earlier roles at CCC, ██████████ worked as Chief Operating Officer and VP of Dissemination and Implementation. Previously, she served as a Sr. Research Associate at WestEd, leading dissemination for Doing What Works.</p> <p>██████████ has 20 years of experience at CCC, holding management positions in both program development and publishing. She worked on the development of three editions of <i>SIPPS (Systematic Instruction in Phonological Awareness, Phonics, and Sight Words)</i>. ██████████ was also a developmental editor in educational publishing at Prentice-Hall and in graduate-level textbooks at Allyn and Bacon (now Pearson).</p> |
| <p>██████████<br/> Evaluation<br/> Lead<br/> SRI</p>  | <p>██████████ is a Principal Researcher and Evaluation Methods lead at SRI Education. ██████████ studies the implementation, impacts, and scaling of interventions designed to improve student outcomes through improved instructional quality. ██████████ has led six RCTs with program implementors at the National Writing Project, the University of California at Irvine, and New Leaders. She currently leads multiple national scale-up evaluations of PL programs to support literacy instruction. She has a PhD in Policy Analysis from Stanford University School of Education.</p>   |

#### B4. Dissemination

WestEd will leverage its extensive outreach resources as well as those of our well-established partners — CCC and SRI — to disseminate project information, RAAL PL services and curriculum. WestEd, in partnership with SRI, will use three mechanisms to support the broad dissemination of project information including evaluation findings. We will: 1) share RA4ALL research and implementation stories at relevant national and regional conferences (e.g., AERA, Literacy Research Association; National Council of the Teaching of English); 2) create content for outlets that reach a broad range of stakeholders such as peer-reviewed journals, practitioner forums, downloadable infographics, podcasts, and webinars; and 3) make RA4AALL research reports and resources available on SRI, WestEd, and Reading Apprenticeship **websites, email contacts, and social media channels** which collectively engage more than 350,000 people.

WestEd has processes, infrastructure, and resources that support quality replication and service. RAAL will be disseminated as a prominent part of WestEd’s Reading Apprenticeship **service line** which annually engages about 2,500 educators in PL through \$1.6 million in contracts with LEAs and SEAs. Over 87 districts have purchased RAAL in the past 10 years, and 285 schools have demonstrated their interest in an updated version of RAAL through their support letters for this RA4ALL proposal. We are able to achieve this scale with fidelity because of our detailed facilitation guides, multi-year facilitator-in-training program, ongoing facilitator and coach community of practice, core materials (a book, *Reading for Understanding*, and PL materials), and our extensive Customer Relations Management (CRM) systems. During Phase 3, WestEd will leverage these existing systems, finalize refined facilitation guides for RAAL PL, and prepare 15 national facilitators to lead this training.

CCC will publish and market the RAAL curriculum. CCC is an ideal project partner because of its complementary capabilities in publishing and disseminating curriculum at scale, serving over 1,000 school districts in every state and 15 of the Council of Great City School Districts.

CCC will leverage its network of consultants and established marketing team to market the RAAL curriculum and WestEd-provided PL.

#### B5. RA4ALL's Potential for Being Used Effectively in a Variety of Other Settings

As documented in the significance section, RAAL addresses a widespread need to support adolescent learners in strengthening their reading comprehension skills. Currently, very few literacy interventions for both students and teachers are available at the secondary level, and even fewer include high-quality PL. The potential for RAAL's effective use in a variety of settings is supported by RAAL's evidence base: RAAL's impact was directly studied in 34 schools in 10 states (Somers et al., 2010) which included both urban and rural settings, and the practices embedded in RAAL and *SIPPS* are supported with moderate to strong evidence in *Providing Reading Intervention for Students in Grades 4-9* (Vaughn et al., 2022). Further, since 2019, the RAAL curriculum has been used by schools in 24 states as well as in Canada. Over the past five years, *SIPPS* has been used in 16,000 classrooms. Through addressing identified barriers to scaling, this project seeks to further enhance RAAL's usability and test its use with additional populations facing new challenges.

***Building on existing strengths: addressing needs of a range of students and standards alignment.*** RAAL and *SIPPS* already include features that make them usable in a variety of settings. Both include resources designed to meet students at a range of developmental levels. RAAL includes texts at a range of reading levels that meet students where they are and provide access to grade-level, disciplinary content. *SIPPS* is designed to identify whether students need foundational skills instruction and the level of instruction needed. For both, teachers learn how to meet their students' varying proficiency levels. RAAL is designed to address common state literacy standards and build a pathway to high school graduation and college admission. For example, RAAL received approval as an elective meeting California's A-G college entrance requirements, earning students course credits.

***Engaging in iterative design and refinement.*** Phase 1 of this project will employ an iterative design process to improve RAAL curriculum and PL using teacher and student data (Greenleaf et al., 2023a). RA4ALL will rely on the same iterative process at multiple program and operations levels to ensure that the program is **appropriate to, and will successfully address, 8<sup>th</sup> and 9<sup>th</sup> grade teachers and their developing readers.** Specifically, we will conduct focus groups with current and past RAAL curriculum users to ensure that the proposed refinements will address their concerns. We will collaborate with 3-6 current RAAL teachers in who teach high-need students to pilot the refined materials. We will observe RAAL classes, interview teachers, and collect de-identified student formative assessment data. We will further refine materials based on this usability study. SRI's formative feedback in Phase 2 will provide additional insight into RAAL's usability as well as the conditions and local infrastructure that support effective implementation and positive outcomes. The RA4ALL team will incorporate feedback from the 70 Phase 2 teachers representing 25 schools in 5 states prior to publication in Phase 3.

***Leveraging materials design to enhance RAAL's usability.*** The design of curriculum materials shapes their usability. From the project's inception, WestEd and CCC will ensure that the materials meet the high standards represented in CCC's products suite. The team will use design templates developed by CCC and adjust materials to be easily and broadly usable (e.g., standardizing the length of each lesson to a single class period).

## **C. QUALITY OF PROJECT DESIGN**

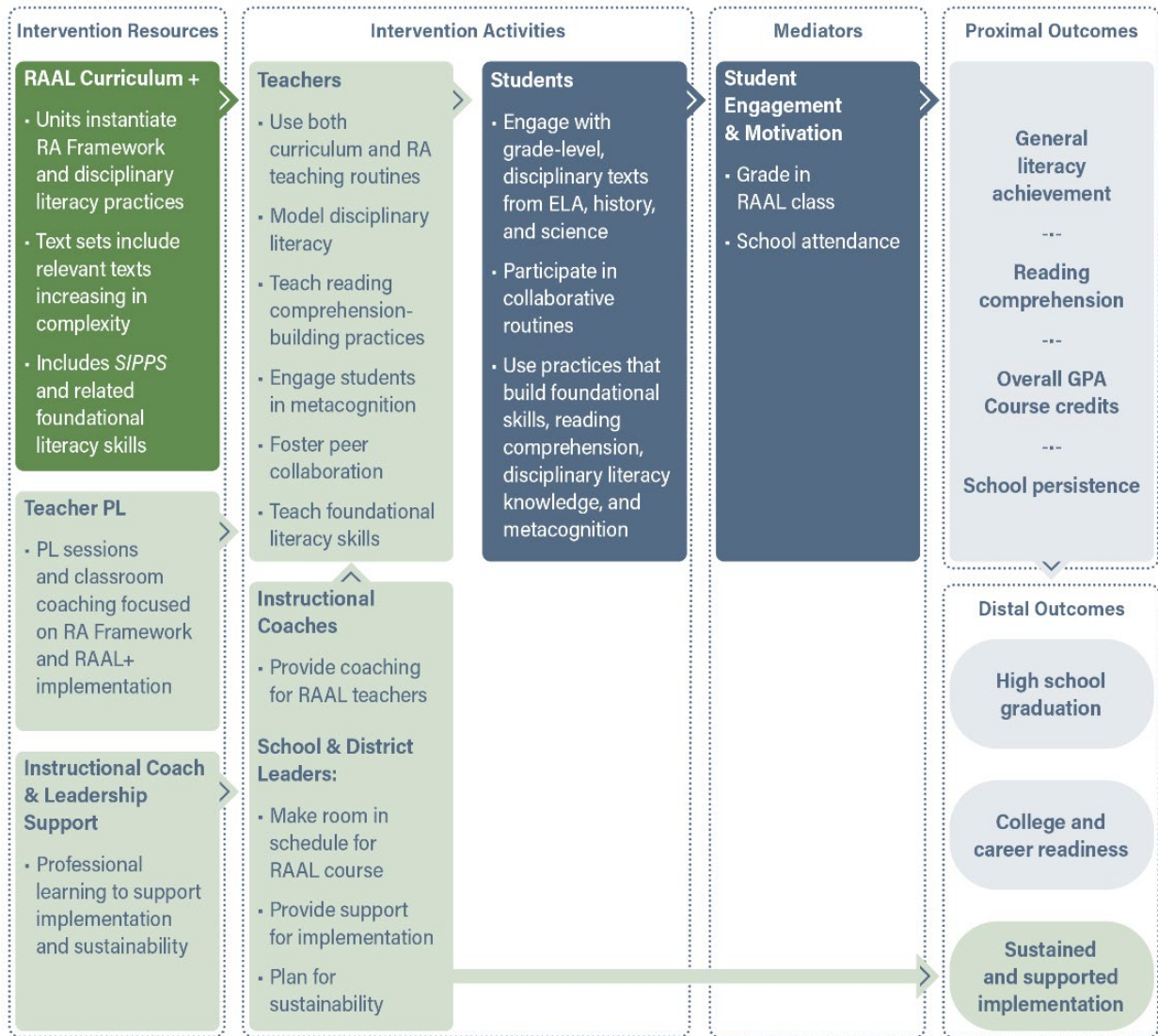
### **C1. Conceptual Framework**

RA4ALL provides three sets of intervention resources as shown in Exhibit 4 below: 1) the existing and tested RAAL curriculum and *SIPPS*; 2) RAAL professional learning (PL) (Darling-Hammond, Hyler, & Gardner, 2017); and 3) PL for coaches and administrators to support implementation and sustainability. Together, these resources reflect research that demonstrates positive effects of curriculum *plus* professional learning. Specifically, such programs more effectively support teachers to adopt evidence-based practices (Penuel et al., 2007) and lead to



greater impacts on student achievement than did programs that included only one of these elements (Lynch et al., 2019).

Exhibit 4. RA4ALL Conceptual Framework (Appendix G)



The integrated RAAL and *SIPPS* curriculum (intervention resource 1) features evidence-based practices for reading intervention and literacy instruction for adolescent readers, including three of the four recommendations in the WWC practice guide, *Providing Reading Interventions for Students in Grades 4-9* (Somers et al., 2010; Vaughn et al., 2022). The RAAL curriculum is well-researched and its PL is also rooted in the Reading Apprenticeship (RA) Framework (Appendix J.6). The RA Framework identifies four dimensions of classroom life—social,

personal, cognitive, and knowledge building—that support students in becoming stronger readers and learners (Greenleaf et al., 2023b). These dimensions are tied together through metacognitive conversation and extensive opportunities to read relevant, disciplinary texts.

RAAL’s PL (intervention resource 2 in Ex. 4) engages teachers in an inquiry into the RA Framework and introduces them to RAAL and *SIPPS* (Greenleaf et al., 2023b). The PL exhibits all seven characteristics of effective PL identified by a 2017 synthesis of 35 studies of PL (Darling-Hammond, Hyler, & Gardner, 2017): content focused on evidence-based adolescent literacy practices; incorporates active learning through inquiry; supports collaboration; uses models of effective practice through the live PL as well as via analysis of classroom video cases and curriculum; provides expert coaching from WestEd facilitators Year 1 and local coaches subsequently; engages teachers in reflection; and is of sustained duration, with 30 hours of PL over two summers and one school year, plus coaching for two years. RAAL has shown positive impacts on high needs students as well as clear correlations between changes in teacher classroom practice and impacts on students’ learning and social engagement (see [evidenceforessa.org](https://evidenceforessa.org)).

Finally, with intervention resource 3, RA4ALL provides supports for local instructional leaders including instructional coaches, principals, and district administrators to support depth, sustainability, and shift in reform ownership (Coburn, 2003). Instructional coaches participate in 72 hours of PL and have frequent opportunities to collaborate with WestEd facilitators to address challenges and reflect on successes. They in turn provide local support to RAAL teachers. Administrators participate in 10 hours of online PL that supports them in creating the conditions needed for RAAL implementation. Reading Apprenticeship has been refining its administrator PD and coaching models since 2010.

These three sets of intervention resources will support teachers in implementing RAAL and enacting evidence-based literacy intervention practices. Classroom teachers’ actions then in turn shift what students experience and do in the classroom (student activities & mediators) – engage

with disciplinary texts, participate in collaborative routines and use comprehension-building practices that improve reading. Students’ engagement in RAAL classes and schools mediates their proximal outcomes and ultimately our long-term goals of high school graduation and readiness for college and career.

**C2. Goals, objectives, and outcomes are clearly specified and measurable.**

To enact the conceptual framework, the project team has defined the following goals and objectives (Exhibit 5) which are tied to measures and roles in detailed plans that include project and evaluation milestones and timelines (Exhibit 2 & Appendix J.7). Further detail about the related measures is in the evaluation plan (Section D).

*Exhibit 5. Measurable Goals and Objectives*

| <b>Goal 1. Refine and pilot RAAL curriculum</b>   |   |
|---|---|
| <i>Objectives</i>   | <i>Outputs and Outcomes</i>   |
| <b>Objective 1.1.</b> Refine the RAAL curriculum by streamlining the content, updating texts, and incorporating <i>SIPPS</i> .                                | <b>1.1</b> RAAL Curriculum Units ready for pilot phase<br><b>1.1</b> PL includes support for <i>SIPPS</i> |
| <b>Objective 1.2.</b> Recruit pilot schools and teachers.   | <b>1.2.</b> MOUs with RAAL pilot districts.   |
| <b>Objective 1.3.</b> Gather data and feedback from pilot teachers and schools.   | <b>1.3.</b> Identify additional refinements to RAAL curriculum based on pilot results.                    |
| <b>Objective 1.4.</b> Incorporate pilot feedback into curriculum.   | <b>1.4.</b> Finalize curriculum for evaluation use.<br><b>1.4.</b> Make available on CCC platform.        |
| <b>Goal 2. Improve student learning outcomes.</b> Improve the reading comprehension of Grade 8 and 9 students who test well below grade level on state tests. |   |
| <b>Objective 2.1.</b> Recruit 50 schools and randomize them to treatment or control conditions  | <b>2.1.</b> List of school assignments with signed MOUs   |
| <b>Objective 2.2.</b> Implement RAAL with approximately 6,750 students total across 4 years   | <b>2.2.</b> Class rosters from study schools  |
| <b>Objective 2.3.</b> Demonstrate effects of RAAL on reading comprehension  | <b>2.3</b> Impact of RAAL (compared with BAU) on: GISA & state test scores, course pass rates, attendance |
| <b>Goal 3. Support teachers in implementing RAAL with fidelity and build their capacity to teach evidence-based reading practices.</b>                        |   |

|   |   |
|---|---|
| <b>Objective 3.1.</b> Recruit approximately 140 RAAL teachers (70 treatment; 70 control)                          | <b>3.1.</b> List of participating teachers.   |
| <b>Objective 3.2.</b> Teachers participate in RAAL PL.  | <b>3.2.</b> Teacher attendance in PL is sufficient to support implementing RAAL with fidelity.                      |
| <b>Objective 3.3.</b> Teachers implement evidence-based literacy instructional practices.                         | <b>3.3.</b> Annual surveys of classroom practice meet fidelity of implementation.                                   |
| <b>Goal 4. Develop mechanisms for sustainability and scale.</b>   |   |
| <b>Objective 4.1.</b> Build district and school capacity for sustaining use of evidence-based literacy practices. | <b>4.1.</b> Train 12 district coaches in supporting RAAL curriculum.<br><b>4.1.</b> Train admins to support RAAL.   |
| <b>Objective 4.2.</b> Build national capacity for providing RAAL PL.  | <b>4.2.</b> Train 15 national RAAL facilitators to support RAAL implementation.                                     |
| <b>Objective 4.3.</b> Publish and market RAAL in updated print and digital formats.                               | <b>4.3.</b> CCC publishes, markets, and disseminates RAAL.  |
| <b>Objective 4.4.</b> Implement the published version of RAAL in control schools and classrooms.                  | <b>4.4.</b> Reach an additional 25 schools, approximately 70 teachers, and 2,000 students with updated RAAL course. |
| <b>Objective 4.5.</b> Further refine the PL model to increase affordability and scalability.                      | <b>4.5.</b> Based on evaluation, identify necessary and optional components of RAAL PL.                             |

**C3. RA4ALL successfully addresses the needs of the target population**

The target population for RA4ALL is 8<sup>th</sup> and 9<sup>th</sup> grade students from diverse socioeconomic backgrounds and geographic locations who score below grade-level proficiency on their state literacy tests. RAAL has demonstrated impact with students below proficiency (Somers et al, 2010). 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). The proposed refinements to RAAL — updating texts, streamlining the course to ensure engagement in three core disciplines’ reading practices, and integrating *SIPPS* for students who need additional foundational skills support — address important barriers to teachers’ and schools’ ability to successfully meet the literacy needs of their students. We have secured letters of support from districts and state education agencies representing 285 schools in five states: Michigan, Nevada, New Mexico, Texas, and Utah. That is nearly six times the number of schools needed for the project’s evaluation and demonstrates belief from a diverse set of district leaders that RAAL will

address unmet student and teacher needs. In all five states, 8<sup>th</sup> grade reading outcomes on NAEP have decreased to a statistically significant degree (MI, NM, and TX) or remained about the same (NV and UT).

*Exhibit 6. Percentage of 8th Grade Students Scoring Below Basic on NAEP, 2022 and 2019*

|      | Michigan | Nevada | New Mexico | Texas | Utah |
|------|----------|--------|------------|-------|------|
| 2022 | 32%      | 32%    | 43%        | 34%   | 25%  |
| 2019 | 27%*     | 31%    | 29%*       | 26%*  | 23%  |

\*Shows statistically significant difference in the percentage of 8<sup>th</sup> Grade students scoring below basic in 2019 & 2022.

State literacy test scores paint a similar picture. Exhibit 7 shows the high percentage of 8<sup>th</sup> grade students at the state level who performed below grade level. Both the NAEP and state ELA data for these states reflect the urgent need for RAAL courses and PL to support a broad range of students who come to school with exceptional life experience but often limited opportunities to improve their literacy abilities.

*Exhibit 7. Percentage of 8th Graders performing below proficient on state ELA tests, 2022*

| Michigan (PSAT) | Nevada (SBAC) | New Mexico (ACCESS) | Texas (STAAR) | Utah (Utah RISE) |
|-----------------|---------------|---------------------|---------------|------------------|
| 40%             | 56%**         | 66%*                | 48%           | 55.2%            |

\*\*NV’s scores reflect the 2020-2021 academic year.\*NM reflects standardized ELA test scores for all grade levels. NM Public does not report proficiency rates by grade.

RAAL has been shown to benefit students’ scoring in the bottom quartile of literacy assessments (Somers, et al., 2010). Given the increase in students performing below NAEP Basic, cited in the significance section (NAEP, 2022), and the low literacy proficiency rates among our state partners, updating and expanding the use of RAAL is likely to address the literacy challenges faced by high-needs students in our district and state partners. For this project, we define high-needs students as those who test below proficient on their state ELA assessments.

## D. QUALITY OF THE PROJECT EVALUATION

WestEd will collaborate and contract with SRI International to conduct the program evaluation aligned to the conceptual framework (Exhibit 4). In Year 1, WestEd will conduct an initial pilot to determine the usability of the refined RAAL teacher and student materials (i.e., updated texts, streamlined content, integration of *SIPPS*) in 3–6 pilot schools. In Years 2–3, SRI will conduct an implementation, cost, and impact study in 50 schools, designed to meet What Works Clearinghouse standards without reservations. In Years 4–5, WestEd will implement RAAL in the control schools and conduct an implementation study.

The evaluation’s research questions are: **Usability:** Are the refined materials clear and easy to use? Can the full course be taught in a single academic year? What additional refinements need to be made? What professional learning supports are most needed to support implementation with fidelity? **Implementation:** Was RAAL implemented with fidelity? What contextual factors facilitated or impeded local implementation? **Treatment-control Contrast:** What is the difference between RAAL and business-as-usual intervention classes? **Student Proximal Outcomes:** What is the impact of RAAL on students’ grades in the reading intervention course, attendance, reading comprehension, state standardized ELA assessments, GPA, and retention in school? **Moderation:** Do student impacts vary by student prior achievement, prior levels of attendance, baseline decoding skill, or demographic sub-group? **Mediation:** How do any measurable proximal impacts on grades in intervention classes and school attendance mediate the impacts of RAAL on other measures of student academic performance? **Cost:** What are the ingredients required to implement RAAL and what is its cost effectiveness relative to the control condition? **Replication:** Do schools implement RAAL with fidelity when supported by a more streamlined set of professional learning supports? To what extent do local teachers and leaders develop the expertise, sense of ownership, and depth of change required for scaling and sustainability?

To answer these research questions, SRI will collect implementation data (observations and attendance records of professional learning, site visits, coach observation logs, teacher surveys),

baseline measures (student-level extant data and a measure of baseline decoding), and outcome data (a study-administered measure of reading comprehension and student-level extant data). See Exhibit 5 in Appendix J.8 for a detailed timeline of the evaluation’s data collection activities.

#### D1. Meeting the What Works Clearinghouse (WWC) Standards Without Reservations

SRI will conduct a two-year cluster-randomized control trial to estimate the effect of RAAL on student outcomes to provide evidence that will meet WWC evidence standards without reservations. SRI will conduct the two-year RCT in the participating districts during 2025–26 and 2026–27. To implement the RCT, WestEd will recruit 50 schools within 10 districts in MI, NM, NV, TX, and UT. Schools will be considered eligible for recruitment if they offer reading intervention classes to support developing readers in 8th or 9th grade. The student analytic sample will be defined as those students identified by school policy to be enrolled in those intervention reading classes (a preintervention pretreatment characteristic).<sup>1</sup> This approach has several advantages. First, it ensures that the program will be implemented as planned (e.g., avoiding scheduling issues, hiring intervention staff). Second, focusing on intervention reading classes will allow us to estimate the effect of RAAL relative to a business-as-usual intervention course, rather than the combined effect of RAAL and additional time on task provided by a supplemental reading class. Finally, defining the analytic sample as students in intervention reading courses focuses the analyses on populations most likely to benefit from RAAL.

SRI will support WestEd’s recruitment and communication with teachers and school leaders to ensure that participants at all levels of the system are fully informed about study details prior to random assignment, developing relationships and proactively preventing attrition. SRI will then randomly assign half of the schools into treatment (receiving RAAL curriculum, materials, and training in 2025–26 and 2026–27) and half into control (maintaining their existing reading

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<sup>1</sup> SRI will collect rosters of students, and their relevant state test scores and grades, prior to randomization, along with school policies guiding assignment into intervention classroom. SRI will use an intent-to-treat framework to analyze the data and ensure the design follows WWC standards on student joiners.

intervention curriculum during 2025–26 and 2026–27 and receiving RAAL in 2027–28). Randomization will be blocked by region and prior achievement to provide balance across treatment conditions (accounting for prior achievement, local policy, etc.). SRI will keep both overall and differential attrition low using incentives and regular meetings with local coordinators as well as school and district staff to enlist support for communication and follow-up (Roschelle, et al., 2014).

The RCT will assess outcomes on two cohorts of students: those who take the RAAL class in either 2025–26 or 2026–27. All data will be collected and analyzed in accordance with WWC standards, including the use of baseline data to check for equivalence, similar collection across treatment and control conditions, and the use of Hierarchical Linear Models (HLM) to reduce the risk of Type I error associated with clustered data.

As not all states administer an ELA exam in 9th grade, the primary impact outcome for this study will be a study-administered measure of reading comprehension, the Global Integrated Scenario-Based Assessments (GISA).<sup>2</sup> WWC’s Study Review Protocol names GISA as an independent literacy measure known to meet WWC standards. SRI will estimate the impact of RAAL on student outcomes using the following HLM model:

$$\widehat{Reading}_{ij} = \beta_0 + \beta_1 Treatment_j + \rho_{ij}\beta_2 + \lambda_j\beta_3 + \mu_j + \zeta_{ij}.$$

While randomization should account for all observable and unobservable differences between treatment and comparison groups, SRI will include a vector of student controls, including demographic characteristics, grade level, cohort, baseline decoding score, and prior ELA state achievement test scores to improve precision of the estimates ( $\rho_{ij}$ ), and a vector of randomization block fixed effects to account for the constrained randomization ( $\lambda_j$ ). We account for error at the school level with the random effect and student level with  $\mu_j$  and at the student level with  $\zeta_{ij}$ , respectively. No data will be imputed (complete case deletion).  $\beta_1$  provides an

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<sup>2</sup> GISA has been rebranded as ReadAuthentix, though it is listed as GISA both in the WWC study review protocol. The assessment itself was unchanged during the rebranding.



estimate of the effect of student assignment to RAAL (the intent-to-treat effect). We estimate a Minimum Detectable Effect Sizes (MDES) of .17 using a two-level model, assuming the top-level N is 50 schools and an average of 120 tested students per school.<sup>3</sup> We use estimated ICCs and R2s in reading including pre-test and demographic covariates for grade 9 in low-SES schools from Hedges & Hedberg (2007; for ELA, ICC=.05,  $\eta^2$ =.16,  $\eta^2$ W=.47). See below for additional student outcomes.

## D2. Provide Guidance for Effective Strategies for Replication

Each phase of this evaluation will take a strategic lens towards replication. In the refinement phase (Phase 1), WestEd will focus on understanding how to best streamline the RAAL curriculum while also integrating *SIPPS* into RAAL to ensure that the RAAL curriculum provides supports students who have not yet internalized foundational skills. In the implementation and RCT phase (Phase 2), SRI will document the fidelity of and variation in implementation across sites during the impact study. SRI will triangulate these implementation fidelity data with additional qualitative and quantitative data to understand and explain the variation in implementation to provide WestEd—and the field—with greater understanding of the conditions and supports (e.g., scheduling considerations, coaching dosage) necessary for successful program implementation. In the scaling phase (Phase 3), WestEd will offer a streamlined professional learning sequence and collect one year of fidelity of implementation data consistent with the lower intensity of PL.

In Phase 1, WestEd will work with teachers experienced with the previous RAAL curriculum to understand teachers' and students' classroom experiences with the refined RAAL curricular materials to further refine RAAL, as needed. They will observe each pilot classroom and interview teacher once per unit and analyze formative assessment data from the RAAL

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<sup>3</sup> We assume 90 students per school, per cohort, for a total of 180 per school, and generously allow for 33% student-level attrition in our power calculations.

Curriculum Embedded Reading Assessment (CERA; Appendix J.4) and *SIPPS* placement tests to guide refinements to the RAAL curriculum.

In Phase 2, SRI will collect a structured set of “implementation fidelity” indicators (described below) at the class, school, district, and program levels. They will also collect and analyze aligned qualitative data to describe variation in implementation through professional learning observations, implementation logs provided by coaches, and school site visit (class observations, student focus groups, and interviews with teachers, coaches, principals, and district leaders). Using these data collection methods, SRI will study (a) the resources WestEd invests in professional learning; (b) teachers’ use of and experience with project components; (c) coaches’ ability to provide support for RAAL teachers; (d) school & district leaders’ support for implementation, sustainability, and ongoing instructional inquiry. While addressing these four focus areas, researchers will pay close attention to local contextual factors that support or inhibit implementation, documenting variation in implementation and adaptation to local needs (e.g., variation in students’ baseline decoding, placement of literacy coaches at school or district level).

Data from teacher surveys, interviews with district leaders, and artifact analysis of curricular materials will also provide information regarding the differences between RAAL and the business-as-usual experience (treatment-control contrast). Final analysis will triangulate these data with the site visit findings, implementation fidelity data, and impact estimates to identify critical project components that can be replicated and sustained.

***Cost Effectiveness.*** SRI will conduct a cost effectiveness study to evaluate the benefit of RAAL against the costs. For both the treatment and control groups, SRI will collect cost information using the ingredients method (Levin & McEwan, 2001). SRI will identify each program input through a review of documents and a series of implementation interviews. Based on these data, SRI will define a list of program components, or ingredients, from which to determine incremental costs. Using data collected from individual sites, publicly available data, and resources such as the “Cost Out” tool developed by Columbia’s Teachers College, SRI will

determine the value of resources required for implementation. SRI's analysis will calculate cost effectiveness ratios to aid comparisons of the cost effectiveness of RAAL to other interventions.

In Phase 3, WestEd will adapt SRI's implementation fidelity matrix and data collection tools for use in its abbreviated implementation. They will collect and analyze this data to better understand and describe program implementation within a 1-year implementation. WestEd will also use purposive sampling (Palinkas et al., 2015) to select up to five schools to study based on their capacities to scale and sustain RAAL. They will collect data (administrator interviews, teacher and instructional coach focus groups) to understand critical, sustainability levers.

### D3. Measurable Thresholds of Implementation, Key Components, Mediators, & Outcomes

The evaluation is designed to align with the conceptual framework (Exhibit 4), including all key project components and their relationship with the mediators and outcomes.

***Measurable Thresholds of Implementation by Key Project Components.*** SRI will assess the fidelity of program implementation in all treatment districts in 2025–26 and 2026–27. We will collect records of teacher and leader attendance at RAAL professional learning sessions as well as teachers' perceptions regarding the PL from the teacher survey to measure the duration, breadth, and quality of teacher professional learning (Component 1). Further, SRI will analyze the content of coach instructional logs,<sup>4</sup> submitted records of RAAL's curriculum-bedded reading assessment (CERA) and relevant teacher survey items to assess teachers' use of the RAAL curricular materials, routines, and formative assessment (Component 2). Finally, we will collect records of coach and administrator attendance at professional learning sessions and convenings to assess leadership training for program sustainability (Component 3).

While WestEd expects all participants to be fully engaged in all aspects of RAAL, we also have set minimum annual thresholds for engagement on components of implementation fidelity,

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<sup>4</sup> Coaches will fill out a more detailed instructional log each time they observe a RAAL teacher's classroom. The logs' content and structure will be based on the classroom observation protocols developed as part of the Sommers et al. (2010) evaluation of RAAL.

provided in Exhibit 8. For the project as a whole to meet implementation fidelity, 80% of districts must implement all components with fidelity each year. Components, indicators, data sources, and thresholds are adapted from those set in Sommers et al. (2010) and Fancsali et al. (2015), prior evaluations of RAAL and Reading Apprenticeship PL implemented at levels of fidelity sufficient to demonstrate positive impacts for student achievement.

*Exhibit 8. Key Components and Annual Thresholds for Implementation Fidelity*

| <b>Key Components &amp; Indicators</b>   | <b>Thresholds</b>                                       | <b>Data Source</b>                           |
|--|---|--|
| <b>Component 1: Active, sustained participation in professional learning</b>   |   |  |
| At least 80% of sites reach site-level threshold on both indicators  |   |  |
| Indicator 1.1a: Teachers attend full-day PL sessions (Year 1)  | 80% attend at least 3 days                              | Attendance trackers                          |
| Indicator 1.1b: Teachers attend full-day PL sessions (Year 2 rollup)   | 80% attend at least 4 days total                        | Attendance trackers                          |
| Indicator 1.2: Teachers attend coaching sessions   | 80% attend both sessions                                | Attendance trackers                          |
| Indicator 1.3 PL activities demonstrate discipline-specific, comprehension-building practices  | 80% of teachers indicate “always” or “regularly”        | Teacher survey                               |
| <b>Component 2: Use of RAAL materials, routines, and assessments</b>   |   |  |
| Indicator 2.1: Teachers implement thematic units with disciplinary texts and end of unit curriculum-embedded assessments                           | 80% implement all 3 units                               | Coach logs; teacher survey; CERA assessments |
| Indicator 2.2: Teachers teach foundational skills based on SIPPS assessment results  | 80% teach foundational skills based on placement test   | Coach logs; teacher survey                   |
| Indicator 2.3: Teachers model, teach, and facilitate student use of discipline-specific, comprehension-building practices, including metacognition | 80% model, teach, & support comprehension practices     | Coach logs; teacher survey                   |
| Indicator 2.4: Teachers support students in peer collaboration   | 80% support peer collaboration                          | Coach logs; teacher survey                   |
| <b>Component 3: Leadership training for program sustainability</b>   |   |  |
| Indicator 3.1a: Coaches attend full-day professional learning sessions (Year 1)  | At least one coach per district attends at least 6 days | Attendance trackers                          |

|  |   |                     |
|--|---|---------------------|
| Indicator 3.1b: Coaches attend full-day professional learning sessions (Year 2 rollup) | At least one coach per district attends at least 6 days | Attendance trackers |
| Indicator 3.2: Administrators attend RAAL for leaders' online sessions                 | At least one admin per schools attends 4 sessions       | Attendance trackers |

**Outcomes, Mediation & Moderation.** In addition to assessing outcomes on the GISA, SRI will collect a rich suite of outcome data aligned to both the conceptual framework and the current WWC Study Review Protocol (2023). This alignment will allow for findings relevant to the project and captured by “common measures,” as called for by IES’s Standards for Excellence in Education Research (SEER). Common measures are not just valid and reliable, but also widely used, allowing for comparison of effect sizes between interventions that target similar outcomes. Further, drawing outcome measures from the WWC study review protocol will support the study to meet WWC standards without reservations.

SRI hypothesizes that the nature of the RAAL classroom—marked by positive classroom climate, access to relevant, disciplinary texts, and extensive talk about text via peer collaboration (Guthrie, Wigfield, & You, 2012)—will lead to greater student behavioral engagement, as demonstrated by course grades (most proximally in the RAAL class itself) and in attendance. This greater engagement in the RAAL class and in school more generally will lead to improved academic outcomes, including overall GPA, academic literacy, and retention in school. Mediator analyses will be used to assess the degree to which course grades and attendance mediate the other effects of RAAL.

To help policy makers determine whether RAAL is appropriate for their unique student populations, and to determine whether RAAL supports more equitable outcomes, SRI will also conduct a series of moderator analyses. These analyses will determine whether there are differences in effectiveness across students based on prior achievement (e.g., state ELA assessments, GPA, baseline decoding skills), prior attendance, and demographic characteristics. See Appendix J.8 for a detailed description of the mediator & moderator analyses.

#### D4. Performance Feedback and Periodic Assessment of Progress

This project's evaluation is designed to provide performance feedback and periodic assessment of progress throughout the phases. During the refinement phase, WestEd will analyze qualitative usability data after each unit to create and implement a list of additional refinements.

During the implementation and RCT phase, SRI has designed their work to provide (1) strong relationships with and greater access to implementing RAAL teachers and coaches and (2) lighter-touch, more regular, and quick turnaround qualitative data collection throughout the span of the RCT. To accomplish the first goal, SRI will maintain a regular presence at RAAL PL to develop a deep understanding of the intervention and facilitate relationships with WestEd and with the intervention teachers and leaders. Generous stipends for research and PL participants will also facilitate regular data collection and strengthen buy-in. SRI has designed and timed the site visits and instructional log data collection to facilitate timely, actionable feedback and quick turn-around analysis. The site visits will occur mid-year, so that the findings can be used to inform the second year of PL, particularly with coaches, which will be designed in the spring and delivered in the summer and subsequent school year. Finally, SRI will analyze and report on implementation fidelity data more than once a year, so that WestEd can use these data to assess progress towards outcomes, inform programming, and adjust as needed.

Regular communication with WestEd throughout the project, including biweekly check-ins and quarterly briefings, will focus on how implementation data can be used to improve programming and identify effective implementation strategies as well as track progress towards the intended outcomes annual targets. This will ensure high-quality, timely data for reporting.

#### Evaluation Resources

SRI and WestEd have worked together on a previous RCT of a Reading Apprenticeship program. Each organization has a clearly defined role related to its expertise and maintains strong relationships and clear lines of communication. The evaluation budget is sufficient to support the substantial effort involved in (1) original data collection [*SIPPS* placement test,

GISA, teacher survey, coaching logs, qualitative field work] and (2) extant data from up to 10 school districts. SRI's budget includes incentives for school and district support in data collection to ensure local support and participation at each site.

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