

**Investing in the National Writing Project’s College-Ready Writers Program:
Expanding the Reach of Effective Teacher-Leaders to Support *All* Students**

Project Narrative

Table of Contents

Absolute and Competitive Preference Priorities.....1

A. Significance.....1

B. Quality of the Project Design and Services.....12

C. Quality of the Management Plan and Personnel.....31

D. Sustainability.....35

E. Evaluation.....41

Absolute Priorities

**Absolute Priority 1: Supporting Practices and Strategies for which there is Moderate
Evidence of Effectiveness7**

Absolute Priority 3: Professional Development for Teachers of Academic Subjects.....12

Competitive Preference Priorities

**Competitive Preference Priority 1: Supporting Practices and Strategies for which there is
Strong Evidence of Effectiveness.....7**

Competitive Preference Priority 4: Supporting High-Need Students15, 21, 29

Competitive Preference Priority 2: Improving Efficiency (Cost-Effectiveness).....17, 23, 27

References

**INVESTING IN THE NATIONAL WRITING PROJECT'S COLLEGE-READY WRITERS
PROGRAM: EXPANDING THE REACH OF EFFECTIVE TEACHER-LEADERS
TO SUPPORT ALL STUDENTS**

In this Supporting Effective Educator Development (SEED) proposal, the National Writing Project (NWP) addresses *Absolute Priority 1: Supporting Practices and Strategies for which there is Moderate Evidence of Effectiveness* and *Absolute Priority 3: Professional Development for Teachers of Academic Subjects*. NWP also directly addresses *Competitive Preference Priority 1: Supporting Practices and Strategies for which there is Strong Evidence of Effectiveness*; *Competitive Preference Priority 2: Improving Efficiency (Cost-Effectiveness)*; and *Competitive Preference Priority 4: Supporting High-Need Students*. These preferences are discussed in sections A and B of the proposal respectively.

A. SIGNIFICANCE

In the context of our national effort to move our education system toward ever-more ambitious goals, policy-makers and practitioners have come together to recognize the power of teacher leadership to build, extend, and sustain successful learning opportunities for all young people.

The National Writing Project has been developing strong, effective teacher-leaders since it began in 1974 with 25 teachers at one local site, the Bay Area Writing Project at the University of California, Berkeley. Working as a networked improvement community (Bryk, Gomez, Grunow, & LeMahieu, 2015; Lewis, 2015) capable of addressing the changing literacy demands faced by our nation's diverse youth, 185 local Writing Project sites, anchored at universities and serving all 50 states, Washington, D.C., Puerto Rico, and the U.S. Virgin Islands, offer sustained learning opportunities for teacher-leaders and provide customized programs for schools and districts, both face-to-face and online.

In 2010, NWP conducted extensive research with teacher-leaders across the country and outlined core principles embodied by teacher-leaders:

Advocating what's right for students; Opening the classroom door and going public with teaching; Working "alongside" teachers and leading collaboratively; Taking a stand; and Learning and reflecting on practice as a teacher and leader. (Lieberman & Friedrich, 2010, p. 95)

NWP K-12 teacher-leaders exemplify these principles. They work to make their practice public through their involvement in NWP Invitational and Advanced Institutes and throughout their leadership of professional learning opportunities in schools and districts. And they produce resources for other educators available through a wide range of social media platforms including Digital Is, NWP Radio, the #CLMOOC (Connected Learning Massive Online Open Collaboration), Twitter chats, and shared Open Educational Resources (OERs).

From 2013-2015, more than 3,000 K-12 teachers chose to extend their teacher leadership work and prepare for new roles in professional development through actively participating in sustained NWP Invitational and Advanced Institutes. Teachers honed their skills to address the demands of the Common Core State Standards (CCSS) and other rigorous college- and career-ready state standards, with an emphasis on active learning and demonstrated performance for all students. These teacher-leaders joined the more than 22,000 educators across disciplines who have participated in sustained leadership development through NWP Invitational and Advanced Institutes over the last decade. In each of the last two years, 5,000 Writing Project teacher-leaders actively engaged in providing professional development in their schools and districts.

In this proposal, NWP seeks to focus and expand its teacher leadership model with an emphasis on professional development in support of college-ready writing. A growing consensus among researchers suggests that effective professional development incorporates five elements: content focus, active learning, coherence with teachers' knowledge and beliefs as well as the

policy environment, sufficient duration, and professional community or collective participation (Borko, 2004; Desimone, 2009). NWP's signature model of professional learning and leadership development embodies these elements. Districts and schools in high-need communities request these services from Writing Project sites; in 2013-14, NWP worked with 3,000 school districts nationally across a spectrum of local needs. Increasingly, we see an expansive need for specific programming that links professional learning opportunities with instructional resources and supports schools in developing strong writing programs to prepare students for new standards and the assessments linked to them. This is the aim of the NWP College-Ready Writers Program. (See Appendix D for letters of support.).

Through this three-year SEED proposal, NWP seeks to expand its College-Ready Writers Program (CRWP), aligned with college- and career-ready standards, to 90 Writing Project sites across the country. We propose to do this through supporting two cohorts of intensive Advanced Teacher Leadership Institutes, followed by participating teachers' leadership of an intensive, two-year professional development effort in middle and high schools serving high-need students. This proposal also outlines a strategy for investing in new teacher-leaders and the ongoing development and wide dissemination of additional resources and tools to support teacher professional development as well as student learning and engagement across content areas.

A.1. National Significance

Significant academic writing—informative, argumentative, and evidence-based—is expected across grade levels and academic subjects, including English Language Arts, as outlined in college- and career-ready state standards recently introduced in most states. Results from the National Assessment of Educational Progress (NAEP) 2011 Writing Assessment highlight the need for continued emphasis on academic writing. Only 27% of all students scored

at the Proficient or Advanced Level in both eighth and twelfth grades (National Center for Education Statistics, 2011). Currently, students across the country are participating in new, more rigorous assessments aligned with these standards—assessments which require a type and level of writing not previously assessed. In more than 35 states, these assessments include performance-based tasks that incorporate source-based writing (e.g., PARCC and Smarter Balanced assessment consortia states; Kentucky). Previous standards-based reform efforts teach us that effective professional development will be key to successful implementation of these far-reaching standards (Cohen, 1990; Resnick, Stein, & Coon, 2008).

It was in this context that the National Writing Project created the College-Ready Writers Program, a professional development program that focuses on building the capacities of students to learn and engage with discipline-based content and to prepare them for a future as active citizens as well as for post-secondary success. Thoughtful citizens read, criticize, analyze, and create arguments in everyday life. At the university level, argument is the common language of academic writing. Successful college writers know how to make a claim, support it with relevant evidence, and cite evidence according to academic conventions—the very skills measured in new state assessments. For these reasons, the ability to read and write arguments is central to today’s college- and career-ready standards.

A gap exists between the educational goals outlined in college- and career-ready standards and the capacity on the ground for teachers and students alike to engage with argument—especially in schools that serve students with the highest need. The current amount of writing instruction is simply not sufficient to meet these new expectations. Baseline data collected as part of an independent evaluation of the CRWP documents that on average, middle and high-school English Language Arts teachers across 44 high-need rural school districts in 10

states taught writing for only 58 minutes a week (Park, Arshan, Harbatkin, & Murphy, 2014). Unfortunately, this slim focus on writing is consistent with other national research (Graham, et al. 2012; Applebee & Langer, 2011a; Graham & Perin, 2007). With extensive development and evaluation in high-need schools, NWP has developed and refined its CRWP to support middle and high-school teachers to implement new standards-aligned approaches, tools, and resources in teaching argument using sources.

CRWP also builds on previous work by NWP that blends both face-to-face and online learning opportunities in order to address new academic standards and to reach teachers across the country. NWP uses digital technologies to support and learn from teachers' active online professional development, and has been a leader in developing strong, interactive communities of practice, which provide resources and learning opportunities for local Writing Project sites, schools, and districts, including those participating in CRWP. This proposal aims to contribute to the growing knowledge base for effective practices in blended professional development.

A.2. Development of Theory, Knowledge, and Practices

For today's schools and districts, particularly those serving high-need communities, the goal of developing and sustaining the human capital to provide high-quality classroom instruction is paramount to ensuring student learning and achievement. To help address needed professional development that meets these goals, local schools and districts call upon Writing Project teacher-leaders for a range of program design and leadership efforts. NWP's College-Ready Writers Program enters the landscape at a time when schools are seeking new approaches to standards-based implementation that engage teachers and students in active learning and support significant student-work products (Education Week Research Center, 2014).

Through supporting the further development and implementation of CRWP, this SEED project will yield new understandings of the intensity, focus, knowledge, and practices needed to teach source-based argument writing in middle and high schools serving high-need students in a variety of state and policy contexts. The CRWP, described in Section B, prepares NWP teacher-leaders to conduct effective professional development using a range of instructional and formative assessment tools. These professional learning programs build on the strong track record already established by NWP sites working in schools across the country.

One new aspect of the CRWP to be piloted as part of this SEED project is a two-week summer program for high-school youth that seeks to address the summer learning gap for many students living in low-income communities. Working with a range of national partners across the country, such as KQED, NWP teacher-leaders have utilized and refined online, interest-based, connected learning activities that engage young people as writers and learners for real-world audiences. Insights from this pilot, which builds on NWP's ongoing work with youth, will contribute to the field's understanding of how to address the summer slide in the context of a strong writing program.

Along with our external evaluators (SRI International and Inverness Research), we are documenting lessons learned from high-need rural districts implementing the CRWP. Reports from the administrators, teachers, and students in these districts illustrate the importance of expanding such professional learning opportunities to high-need schools across the country. For example, Superintendent Sheila Jackson from Grant Parish, Louisiana, noted:

In Grant Parish, we have witnessed the many benefits of the NSU [Northwestern State University] Writing Project for our teachers and our students.... The ability to be exposed to a variety of texts and writing strategies as well as the allowance to stop and reflect on their own professional practice has caused Grant Parish English teachers to grow in both their skill and teaching abilities. Teachers received ideas and strategies that could be used immediately with their students, and students actually began to write more and with

greater success. Also, our teachers have gained stronger leadership skills through the leadership component of the professional development. Not only have teachers worked collaboratively, but they have also “stretched” themselves to make presentations and share their best practices with each other. (Appendix D)

This SEED project, building on what we are already learning from CRWP, will provide an opportunity to further contribute knowledge about improving the teaching of argument writing and building teacher leadership capacity to support change. In addition, it will support the creation of high-quality, high-leverage, scalable professional development, curricular, and assessment resources that can be used across NWP’s network of sites as well as by the field. Importantly, the content and materials embedded in our proposed project address two high-priority needs identified by teachers: a shortage of high-quality, standards-aligned curricular materials (Education Week Research Center, 2014), and assessments to track student progress on key standards (MetLife, 2013).

A.3. Magnitude of Outcomes

Absolute Priority 1: Supporting Strategies with Moderate Evidence of Effectiveness
Competitive Preference Priority 1: Supporting Practices and Strategies with Strong Evidence of Effectiveness

Previous studies of NWP middle and high school in-service and leadership programs, similar to the proposed project, demonstrate improved student performance when professional development in writing is aligned with teachers’ instructional contexts. Over a 10-year period, the NWP network conducted 2 experimental and 19 quasi-experimental studies to examine the impact of its intensive professional development programs on teachers’ classroom practice and student writing performance. These studies measured growth in writing achievement through independently scored, on-demand writing tasks administered pre- and post-program.¹

¹ For the two experimental studies, scoring was conducted locally by expert teachers of writing not participating in the program using the Academic Writing Assessment. For the 19 quasi-experimental studies, scoring and data processing were conducted nationally and independently of local programs using the NWP Analytic Writing

Independent evaluation consultants conducted analyses of all student outcome data. Together, they offer strong evidence that NWP programs have a positive impact on students' writing achievement, thus meeting **Absolute Priority 1** and **Competitive Preference Priority 1** (National Writing Project, 2010) (See Appendix E).

Five studies, which focus on middle and high school teachers and students, provide evidence that the proposed project will substantially and measurably improve student writing. These studies examine professional development that focuses on improving secondary students' academic writing skills in ways that are consistent with college- and career-ready standards and were situated in communities that serve high proportions of high-need students. These studies show statistically significant differences in growth in student writing performance, with effect sizes ranging from .22 to .81. These effect sizes are comparable to those reported in *Writing Next* (Graham & Perin, 2007), a meta-analysis of experimental and quasi-experimental studies on elements of writing instruction, such as collaborative writing ($d=.75$), pre-writing ($d=.32$), process writing approach ($d=.32$), and study of models ($d=.25$). These elements of writing instruction are a focus of the College-Ready Writers Program.

Santa Ana Unified School District, California. A multisite cluster randomized controlled trial of a cognitive strategies approach to teaching text-based analytical writing for mainstreamed Latino English language learners (ELLs) took place in the Santa Ana Unified School district, where 78% of students are low-income (Kim, Olson, Scarcella, Kramer, Pearson, van Dyk, Collins, & Land, 2011). The study involved 9 middle schools and 6 high schools, from which 103 English teachers stratified by school and grade were randomly assigned to treatment or control groups. Program teachers participated in 46 hours of training as part of the Pathway

Continuum (Bang, 2013; Swain & LeMahieu, 2012). All writing was scored blind to experimental condition, time of administration, student and teacher identity, and location.

Project, conducted by the University of California, Irvine Writing Project, and learned how to apply cognitive strategies by using an on-demand writing assessment to help students understand, interpret, and write analytical essays about literature. Teachers were followed over two years; impact analyses using multilevel models conducted after each year of Pathway professional development revealed significant effects of the intervention on an on-demand writing assessment ($d=.35$) and the California Standards Test (CST) in English language arts ($d=.07$) in both years. In addition, diffusion effects were observed in the second year (Olson, Kim, Scarcella, Kramer, Pearson, van Dyk, Collins, & Land, 2012). This study has been reviewed by the What Works Clearinghouse (WWC) and found to meet WWC evidence standards without reservations (Institute for Education Sciences, 2012). Students in all classrooms taught by Pathway teachers outperformed their peers in all of the classrooms taught by control teachers. Pathway students scored about .094 and .10 standard deviations higher than the control students on the CST ELA and the CST writing subtest, respectively.

Anaheim City School District, California. Researchers conducted a second multi-site cluster randomized trial of the Pathway Project in a separate district from the original study. This district serves 33,000 students, 66% of whom are low-income, and who come from racially, ethnically, and linguistically diverse backgrounds (3% African American, 16% Asian, 64% Hispanic, 12% White, 1% Pacific Islander, 1% Native American, 3% Other, and 23% English Only). The study randomly assigned 100 teachers to treatment and control conditions and included 3,500 students over the two-year period. Teachers assigned to the treatment condition participated in professional development facilitated by the University of California, Irvine Writing Project with the same focus (cognitive strategies) and duration (46 hours) described in the Santa Ana study. Impact analyses using ordinary least squares (OLS) regression conducted

after each year of Pathway professional development revealed significant effects of the intervention on an on-demand writing assessment (Year 1 $d=.46$; Year 2 $d=.57$). In addition, the research analyzed students' pass rates on the California High School Exit Exam and found that "students in the treatment for two years were 2.5 times more likely to pass the CAHSEE than their control peers... [and] students in the treatment for the second year only were 1.8 times more likely to pass" (Olson, Matuchniak, Chung, Stumpf, & Farkas, 2014, p. 4).

Mississippi Statewide Program. The researchers examined the effects of 36 hours of professional development provided to ninth grade teachers in two high schools, one in a rural area and one near a small population center (Swain, Graves, & Morse, 2006). These schools, with 64% and 95% Free or Reduced-Price Lunch (FRPL) eligible populations comprised of 81% and 99% African American youth, were each matched with two comparison schools on economic, ethnic, school expenditure, and prior performance factors. Teachers participated in interactive workshops, study groups, coaching, and classroom demonstrations focused on effective strategies for improving writing. Program students' holistic scores increased by .5 point between pre- and post-intervention, while comparison students' holistic scores increased by .1 point; this difference was highly significant ($p <.001$), with an effect size of .59.

California Statewide Program. This California Writing Project professional development was designed to improve the achievement of traditionally non-college bound students through focusing on instructional approaches to teaching analytical writing and critical reading. Its effectiveness was examined in a two-year study with high school teachers from rural northern California, Los Angeles, and greater Sacramento (Marlink & Wahleithner, 2011). The six high schools in the first year of the study served student populations in which 61% to 100% were eligible for FRPL and 3% to 44% were designated as English language learners (ELL). Teachers

participated in 60 hours of professional development; between pre- and post-professional development, program students' holistic scores increased by .57, while comparison students' holistic scores increased by .24; the difference was statistically significant ($p < .05$), with an effect size of .48.

In a follow-up study, the program focused on eleventh and twelfth grade teachers in two Greater Sacramento area high schools serving student populations in which 69% to 100% were eligible for FRPL and 30% to 44% of students were designated as ELL. In the second year, teachers participated in 11 full day and 4 afternoon professional development sessions. Differences between pre and post holistic scores for the program students were on average .16, while differences between pre and post holistic scores for comparison students dropped by a similar amount (- .15), resulting in a statistically significant difference at the $p < .05$ level in favor of the Writing Project students and an effect size of .32.

Alabama Statewide Study of Teacher Leadership. An Alabama study of middle and high school teachers (grades 7-12) involved 17 program teachers who participated in the Invitational Institute and follow-up professional development and 15 comparison teachers (nominated by their principals as excellent English teachers). Program teachers implemented strategies they learned during the Invitational Institute, such as organizing their classrooms into interactive communities of practicing writers and designing writing instruction as a non-routine task. The work arrangements in these classrooms supported critical thinking and problem solving between the teacher and students (Whyte, 2011). The students in program classrooms ($n = 246$) grew more to a statistically significant degree in a holistic measure of writing achievement over the course of one school year than those in comparison classrooms ($n = 231$) with an effect size of .22 (Whyte, 2011).

Collectively, these studies of student impact meet the criteria for strong evidence of effectiveness (See Appendix E for details). They demonstrate student results that are consistent and favorable in those aspects of writing that are aligned with the expectations of today's college- and career-ready standards, and that the NWP is best known for, such as development of ideas and organization. And, students in Writing Project classrooms gained more often than their peers in the area of conventions, suggesting that basic skills also benefit from the NWP approach to teaching writing (NWP, 2010). The studies demonstrate that teachers who participate in leadership development and in school-embedded professional learning opportunities have a positive effect on students' writing outcomes. They show the positive impact of NWP's programs on high-need students from different U.S. regions and from linguistically and ethnically diverse populations.

Based on the body of research of NWP secondary writing professional development programs, we anticipate that the College-Ready Writers Program will result in increased writing achievement on direct measures of student writing achievement, with effect sizes of .25. Such improvements in writing achievement are critical for high-need students' ability to complete high school and to successfully enroll in college.

B. QUALITY OF THE PROJECT DESIGN AND SERVICES

Absolute Priority 3: Professional Development for Teachers of Academic Subjects

B.1. Project Goals, Objectives and Outcomes

Building on NWP's effective professional learning model and national improvement infrastructure, the project will scale up and disseminate NWP's high-quality professional development for middle and high school teachers, the CRWP, that focuses on preparing students to read and write the kinds of source-based arguments that they will encounter in college and as

citizens. The project also provides an on-ramp for investing in new teacher-leaders, as well as the development and dissemination of additional resources and tools to support student-learning and engagement across content areas, through the NWP national network of 185 university-based sites working in partnership with local schools and districts across the country.

Scaling up the CRWP across the NWP network to improve academic outcomes for high-need students includes: building teacher leadership capacity; engaging teachers in intensive, sustained, and embedded professional development; working with youth to address the summer learning gap; and engaging a broad group of teachers in online learning to enhance their teaching repertoires for teaching argument. This three-year project will be guided by four goals:

- (1) Increase the number of teacher-leaders who are prepared to lead intensive professional development focused on college- and career-ready standards.
- (2) Improve middle and high school teachers' practice in the teaching of source-based argument writing through implementing intensive and sustained CRWP professional development.
- (3) Improve middle and high school student academic writing achievement, especially in writing source-based arguments.
- (4) Expand teachers' access to high-quality professional learning opportunities that address college- and career-ready standards through offering blended professional development and leveraging national partnerships.

To accomplish these goals, NWP will build on its comprehensive professional and leadership development model to incorporate the CRWP, developed through a 2012 Investing in Innovation (i3) Validation Grant (Award #U411B120037).

Table 1. Objectives, Measure and Outcomes

Goal 1. Increase the number of teacher-leaders		
Objective	Measures	Outcomes
1a. Recruit, prepare, and develop 1,800 K–12 teachers across the content areas to participate in intensive literacy leadership development.	# of Invitational Institutes # of K–12 teacher-leaders # of hours Invitational Institute Survey and Follow-up Survey	2016–17 Cohort 1 <ul style="list-style-type: none"> • 75 Invitational Institutes • 900 K–12 teacher-leaders • Average 100 hours 2017–18 Cohort 2 <ul style="list-style-type: none"> • 75 Invitational Institutes • 900 K–12 teacher-leaders • Average 100 hours
1b. Recruit, prepare, and develop middle & high school Writing Project teacher-leaders to participate in intensive leadership development focused on source-based argument writing. (Goals 1 & 2)	# of CRWP Advanced Leadership Institutes (Adv. Inst.) in 35 states # of hours # of teacher-leaders % working in high-need schools	2016–17 Adv. Inst. Cohort 1 <ul style="list-style-type: none"> • 50 institutes (30 hours) • 750 CRWP teacher leaders • 75% work in high-need schools 2017–18 Adv. Inst. Cohort 2 <ul style="list-style-type: none"> • 40 institutes • 600 CRWP teacher leaders • 75% work in high-need schools
	Survey of Use of Source-Based Argument Practices Using Sources Tool (UST)	2016–17 Adv. Inst. Cohort 1 <ul style="list-style-type: none"> • Teach 4 source-based argument mini-units • > use of high-leverage teaching strategies • > quality of students’ writing on UST 2017–18 Adv. Inst. Cohort 2 <ul style="list-style-type: none"> • Teach 4 source-based argument mini-units • > use of high-leverage teaching strategies • > quality of students’ writing on UST
Goal 2. Improve middle and high school teachers’ practice in teaching source-based argument writing		
Goal 3. Improve middle and high school student academic writing achievement		
Objective	Measures	Outcomes
2. Provide CRWP PD in 50 high-need middle and high schools to help teachers and students achieve college and career-ready standards through argument writing across content areas.	# of high-need schools % of teachers participating # of hours of PD	2016–18 <ul style="list-style-type: none"> • 50 high-need schools • 80 hours of PD • 75% of ELA teachers participate in 80 hours of PD (90% of schools)
	<ul style="list-style-type: none"> • Survey of Use of Source-Based Argument Practices • Using Sources Tool (UST) • AWC for Source-Based Argument (AWC-SBA) • Performance-based Reading/Writing Tasks on State Assessments (School Level) 	2016–18 <ul style="list-style-type: none"> • Teach 4 source-based argument mini-units, annually • > use of high-leverage teaching strategies after two years • > quality of students’ writing on UST, annually • > AWC-SBA Content attribute, annually • > school-level state outcomes (in schools with full participation)
Goal 4. Expand teachers’ access to high-quality learning through blended professional development		
Objective	Measures	Outcomes
3. Develop CRWP Online Course with Teaching Channel	# of participants Participant survey	2017–18 <ul style="list-style-type: none"> • Launch to reach up to 1,000 educators

Program Goal 1. Increase the number of teacher-leaders well-prepared to lead intensive professional development focused on college- and career-ready standards.

Program Objective and Expected Outcome. NWP will provide an on-ramp to teacher leadership for 1,800 teacher-leaders through a total of 150 Invitational Leadership Institutes over the course of the three-year project. These Invitational Institutes engage K-12 teachers in building foundational leadership skills and creating knowledge across the disciplines, as well as focusing on specific areas of need, such as teachers of English Learners or discipline-specific institutes like Science and Literacy. These 1,800 teacher-leaders will teach an estimated 135,000 students annually and will also contribute to the work of local Writing Project sites to provide high-quality professional development programs. They will also have access to ongoing Writing Project learning opportunities both face-to-face and online following their institute participation.

In addition, NWP will prepare 1,350 locally-based middle and high school Writing Project teacher-leaders to lead professional learning opportunities focused on argument writing through a total of 90 CRWP Advanced Institutes over the course of the three-year project. These 1,350 teacher-leaders, 75% of whom will come from high-need schools and districts, will teach an estimated 150,000 students annually. Teachers' preparation to facilitate professional development will be measured through a survey of their instructional and leadership practice, use of CRWP instructional materials in their classrooms, and use of NWP's Using Sources Tool (see Appendix E) to assess shifts in the quality of their students' source-based arguments.

Program Goal 2: Improve middle and high school teachers' practice in the teaching of source-based argument writing through intensive and sustained CRWP professional development.

Competitive Preference Priority 4: Supporting High-Need Students

Program Objective and Expected Outcome. NWP will provide intensive and sustained

professional development (80 hours over 2 years) to a critical mass of teachers in 50 high-need middle and high schools focused on teaching argument writing. We expect that 75% of ELA teachers will participate in 40 hours of professional development and will enact 4 argument mini-units each year. Based on current program implementation, we expect that participating teachers will measurably improve the quality of their instruction of argument writing, especially in supporting students to analyze nonfiction sources, use nonfiction sources in their writing, develop claims and coherent reasoning, and consider alternate perspectives. Improvement will be measured through surveys, as well as documented use of CRWP instructional materials.

Program Goal 3: Improve academic writing achievement, especially in writing source-based arguments, for high-need middle and high school students.

Program Objective and Expected Outcome. Through teachers participating in intensive and sustained professional development in 50 high-need middle and high schools across the country, students' writing of source-based arguments will improve. Specifically, we expect the quality of students' use of source material in regular writing assignments to improve on NWP's Using Sources Tool with a 10% increase in the number of papers rated in the top two categories of the overall quality of use of sources between fall and spring of each year of professional development. We also expect an average of a 0.5 point increase on an on-demand reading and writing assessment scored using the Analytic Writing Continuum for Source-Based Argument (AWC-SBA) between fall and spring of each year. If 75% or more ELA teachers in the target grades participate in 80 hours of professional development, we expect to see increases in school-level student performance on state performance-based argument tasks.

In addition, building on our extensive experience with summer youth writing programs, 6 NWP sites will pilot 2 cohorts of Summer Youth Institutes focused on engaging up to a total

of 150 high school youth from high-need urban or rural communities in writing for real world audiences. The objective of this pilot is to learn how such institutes can help to ameliorate summer learning gaps in reading and writing.

Program Goal 4: Expand teachers' access to high-quality professional learning opportunities that address college- and career-ready standards through offering blended professional development and leveraging national partnerships.

Competitive Preference Priority 2: Improving Efficiency (Cost-Effectiveness)

Program Objective and Expected Outcome. Combining face-to-face NWP professional development with additional “just-in-time” learning opportunities facilitated by NWP’s network of exemplary educators enhances and extends participatory learning opportunities and resource development for teachers and districts. NWP’s online communities will continue to be used to share promising practices in order to intentionally scale up practices with promising evidence for student impact or that advance leading-edge work in the use of digital tools for writing. This project draws on existing practices and resources to sustain and expand the reach of the proposed project beyond the intensive leadership and professional development work described in section B2. Specifically, NWP will develop an eight-week web-based CRWP course in collaboration with the Teaching Channel. This course will build on CRWP’s extant, high-quality OER teaching resources. NWP and the Teaching Channel will pilot this course with 100 teachers in 2017-18 and reach an estimated additional 1,000 teachers in school districts across the country beyond the grant period. In addition, 20 Writing Project sites across the country will host two, one-day Assignments Matter Task Jams that will engage 1,000 teachers in creating standards-based assignment tasks that focus on developing source-based arguments. These tasks are shared with colleagues online to further iterate, revise, and implement high-quality teaching materials. These sustainability and dissemination activities are described in Section D.

B.2. Comprehensive Effort

To achieve these ambitious goals, the NWP proposes a two-part comprehensive effort to improve the teaching and learning of source-based argument writing, an academically rigorous set of skills. Our first strategy, NWP Invitational Institutes, involves expanding the national pool of teacher-leaders with 1,650 new educators available to provide leadership around college- and career-ready writing standards. Our second strategy will expand NWP's College-Ready Writers Program through Advanced Leadership Institutes for 1,350 teacher-leaders; intensive, teacher-led professional development in 50 high-need middle and high schools; and efficient use of high-quality CRWP curricular and assessment tools.

Strategy 1. Expand New Teacher-leaders Through NWP Invitational Institutes (Goal 1)

The NWP logic model (Appendix E) is based on the premise that well-informed teachers are the best teachers of other teachers. Writing Project Invitational Institutes include a focus on effective classroom practice and using research-based evidence to support continued professional learning. For Invitational Institutes, local Writing Project Sites recruit approximately 12 exemplary K-12 teachers drawn from across subject areas for the initial intensive (100 hour) Invitational Institute. During the institute, every participant must give a demonstration of a successful approach to teaching writing, writing and reading, or discipline-specific writing in a content area. Demonstrations must include the classroom practice, the supporting research, and the student writing that resulted. All participants write in multiple genres for multiple purposes to gain firsthand experience in the kinds of writing they teach their students and in the kinds of interventions students might need.

NWP's Invitational Institutes have proven to be particularly effective in supporting teachers to become broadly knowledgeable about and effective in teaching writing. Invitational

Institutes accomplish this by bringing together teachers across grades and disciplines. In 2014, consistent with historical trends, 34% of participants taught in elementary grades, 29% in middle grades, 39% in high school, and 9% in college. Similarly, 2014 Invitational Institute participants taught a range of subjects: 48% English Language Arts, 26% Generalist/Elementary, 5% History/Social Studies, 3% Math/Science, and 17% other subjects and areas of focus. Building a professional community and interacting with a diverse range of peers prepared these expert teacher-leaders to contribute to their schools' writing programs (93%), advocate for integrating more writing into content areas (94%); and take on leadership roles with their Writing Projects, schools, and districts (90%) (National Writing Project, 2014). Thus, the proposed Invitational Institutes, which will take place in all 50 states, provide an on-ramp for 1,650 knowledgeable teachers to move into leadership roles in their schools as well as the Writing Project.

Strategy 2. Expand Access to College-Ready Writers Program (Goals 1, 2, & 3)

NWP's College-Ready Writers Program provides high-quality professional development that supports teachers in teaching students to: read nonfiction information and arguments about complex and engaging topics; understand multiple points of view on a single subject; develop nuanced and precise claims; select, rank, and use relevant evidence from nonfiction readings to develop students' own written arguments; and draft, revise, and edit written arguments. For the proposed project, we will use a multi-pronged approach. First, building on the foundation of teacher-leaders' participation in Invitational Institutes, CRWP Advanced Institutes will focus on common program elements that introduce teachers to high-leverage instructional and formative assessment tools and processes. In order to serve as effective facilitators of their peers' learning, it is crucial for these teacher-leaders to test the specific instructional practices and materials in their own classrooms. Second, these teacher-leaders, under the auspices of their local Writing

Project sites, will then facilitate CRWP professional development in schools that serve students with the highest needs and implement summer youth experiences. Third, using CRWP’s curricular and assessment tools, NWP will sustain this work through the ongoing recruitment and preparation of new teacher-leaders (Invitational Institutes) as well as through the development of online OERs and an eight-week course with the Teaching Channel (described in section D). This comprehensive effort builds regional teacher leadership capacity, supports teaching complex skills to students with the greatest need, and sustains and leverages this investment through scalable online resources.

CRWP Advanced Institutes (Goals 1 & 2). Through Advanced Institutes, NWP invests in the further development of teacher leadership capacity focused on leading professional development to teach elements of argument writing for implementation in high-need schools. In order to increase the number of middle and high school teacher-leaders well-prepared to facilitate CRWP professional learning opportunities in high-need schools across the country, Local Writing Project sites will offer a total of 90 CRWP Advanced Teacher Leadership Institutes over the three-year project. Each site will engage at least 15 experienced middle and high school teachers who have already participated in an Invitational Institute. The 30-hour Advanced Institutes will include at least 3 school-year follow-up sessions (See Sample Advanced Institute Agenda in Appendix E). Teacher-leaders will engage in:

- Studying CRWP curricular and formative assessment tools described below;
- Planning for implementing CRWP in their own classrooms; and
- Preparing to facilitate CRWP professional development in high-need schools (e.g., modeling and debriefing source-based argument teaching strategies in classrooms, facilitating analysis of students’ argument writing to inform instruction, coaching teachers, building relationships with teachers and administrators).

The first cohort of 50 CRWP Advanced Leadership Institutes will be conducted in summer 2016 with follow-up activities during 2016-17; the second cohort of 40 CRWP Advanced Leadership Institutes will be conducted in summer 2017 with follow-up activities during 2017-18. Writing Project sites will recruit 75% of participating teacher-leaders from high-need schools.

Competitive Preference Priority 4: Supporting High-Need Students

CRWP Intensive Professional Development in High-Need Schools (Goals 2 & 3). In order to help students meet challenging standards for college and career readiness, local Writing Project sites will facilitate 80 hours of CRWP professional development over 2 school years (2016-17, 2017-18) in 50 high-need middle and high schools. In the first year, professional development will focus on classroom implementation of CRWP Instructional and Assessment tools. In the second year, professional development will focus on adapting and integrating those tools into local curriculum and routine classroom practice, as well as establishing peer response and revision practices and engaging students in developing extended arguments. The CRWP professional development will engage at least 75% of English Language Arts teachers in the target grades (7-11). It will launch with a needs and assets assessment in late spring 2016 that analyzes source-based argument writing in the school's curriculum; teachers' existing experience and expertise in writing; teachers' questions about teaching writing; and students' strengths and areas for growth in argument writing (see appendix for Sample Two-Year Professional Development and Classroom Implementation Plan).

In 2016-17, based on the needs and assets assessment, the Local Writing Project site and its teacher-leaders will select and sequence an introduction to the CRWP text-based argument tasks through whole-group workshops and classroom-based teaching demonstrations. These learning opportunities will be facilitated by teacher-leaders who have participated in

CRWP Advanced Institutes. Teachers will be asked to teach a minimum of four CRWP text-based argument tasks (two of these may be replaced with other curriculum-based argument tasks) per school year, and will receive coaching support as they implement them in their classrooms. At least twice per school year, the professional development will engage teachers in analyzing students' argument writing using CRWP formative assessment tools. Teachers will use this information to help students learn to improve their argument writing.

During 2017-18, Writing Project sites and their teacher-leaders will support teachers in adapting the mini-units and integrating source-based argument writing into their ongoing curriculum. The professional development in year two will also incorporate an explicit focus on writing extended arguments, and teaching peer response and revision strategies focused on improving source-based argument writing. In the summers of 2017 and 2018, NWP will facilitate national, online scoring exchanges that will introduce teachers to NWP's Analytic Writing Continuum for Source-Based Argument and provide teachers with a rigorous measurement tool for assessing their students' writing (Bang, 2013; Swain & LeMahieu, 2012).

Local Writing Project sites participating in the first cohort CRWP Advanced Institutes will be eligible to recruit one or two secondary schools that meet the following criteria:

- The schools must serve 50% or more of students eligible for Free or Reduced-Price Lunch (or 50% of students in the school's feeder pattern must be eligible for FRPL), thereby reaching schools with high concentrations of students living in poverty. Sites will be encouraged to collaborate with schools within urban and rural Local Education Agencies as well as those that serve concentrations of English Learners.
- The principal must agree to participate and to allocate professional development hours to this professional development.
- A critical mass of teachers in the target grades (7-11) must agree to participate in the professional development, teach a minimum of four CRWP argument writing tasks annually, analyze student writing from those tasks, and collect four on-demand student writing samples from one class (fall 2016, spring 2017, fall 2017, spring 2018).

Competitive Preference Priority 2: Improving Efficiency

CRWP Instructional and Assessment Tools. CRWP's design represents a flexible approach to enacting college- and career-ready standards, in that it combines professional development with high-quality, teacher-developed instructional and assessment tools. These tools can be implemented as created, but are meant to serve as models for teachers to create their own resources by adapting and remixing them to meet their own students' needs. As part of all professional learning activities, teachers will be introduced to: **routine classroom activities** (can be used daily); classroom-tested **mini-units** (3-10 instructional days); and **extended argument projects** (multi-week investigations based on students' interests) that support students in learning the specific skills needed for writing source-based arguments (e.g., reading and annotating text, analyzing the credibility of sources, selecting evidence, developing a claim, taking into consideration alternative points of view, drafting and revising written arguments). These resources for teaching source-based argument writing, which is new for many teachers, help teachers envision how to support students in bringing together reading and writing. Strategies embedded in the mini-units (e.g., evidence ranking activity) can be returned to multiple times to reinforce students' argument writing skills. Ultimately, these resources serve as adaptable models for designing new units of study, to be integrated with local curricula.

CRWP will engage teachers in using three types of **formative assessment tools** for analyzing students' argument writing skills: a bank of two-day, on-demand reading and writing tasks; a qualitative analysis tool that examines the quality of claims and reasoning; and the Using Sources Tool (Appendix E) which includes rating scales for how well students make use of evidence from sources in their writing. Many teachers assess writing solely on surface features such as grammar or conformity with a given structure, such as the five-paragraph essay. In

contrast, source-based argument writing requires teachers to analyze different dimensions of writing (e.g., the selection of evidence, critique of source material, quality of claims, and coherence of reasoning) and then help students to understand how to improve these aspects of their writing. CRWP's qualitative and quantitative formative assessment tools, coupled with focused professional conversation, support teachers in seeing what is working in students' writing and in analyzing where they need additional support. They provide teachers and students with language to discuss and improve writing. Student versions of these tools, which will be refined and developed during this SEED project, can help students internalize argument skills.

CRWP's formative assessment tools provide manageable, focused ways of looking at student writing. Yet the overall quality of a source-based argument is determined by how well the author integrates multiple elements into a coherent whole. Therefore, after the 2016-17 school year, NWP will introduce teachers to its **summative assessment** system, the Analytic Writing Continuum for Source-Based Argument (Appendix E). This system, which incorporates carefully selected exemplar papers and a well-honed system for training scorers, will provide teachers with a broad sense of the quality of students' arguments. Using these field-tested curricular and assessment tools, which are available as Open Educational Resources, improves the efficiency of the proposed project.

Pilot CRWP Youth Summer Institute to address summer learning gap. In six communities that serve high concentrations of youth living in poverty, NWP will pilot a new element of CRWP through a combined professional development and two-week summer youth program to address the summer learning gap for high school youth. In these sites, teacher-leaders who have participated in CRWP Advanced Institutes will engage high school youth in reading and writing connected to college, career, and civic purposes using digital affordances for

engaged learning. This project will allow us to learn more about effective strategies to address the “summer slide” for high school youth.

B.3. Sufficient Quality, Intensity and Duration to Lead to Improvements in Practice

The proposed expansion of NWP’s signature Invitational Institutes and its College-Ready Writers Program incorporates effective, research-based professional development features: content focus, active learning, coherence, sufficient duration, and collective participation (Borko, 2004; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Desimone, 2009; Penuel, Fishman, Yamaguchi, & Gallagher, 2007). Importantly, these features of high-quality professional learning environments mirror supports that teachers request as they enact rigorous new college- and career-ready standards (Education Week Research Center, 2014; MetLife, 2013; National Center for Literacy Education, 2014).

Quality. The proposed professional development activities exhibit features of high-quality, effective professional development identified by research and valued by teachers. CRWP professional development has a clear and specific **content focus** (Desimone, 2009) on teaching students to write source-based arguments. It will support teachers in developing their knowledge and skill in using research-based strategies and processes for argument writing instruction, such as collaborative writing, pre-writing, study of models (Graham & Perin, 2007), ongoing peer and self-assessment (Graham, Harris, & Hebert, 2011), and writing to improve reading comprehension (Graham & Hebert, 2010). The focus on argument is **well aligned** (Darling-Hammond, et al., 2009) with college- and career-ready standards; local Writing Project sites will work with administrators and teachers to integrate practices and materials with local curriculum and assessment policies.

According to Darling-Hammond and her colleagues' research syntheses, "Intensive professional development, especially when it includes **applications of knowledge** to teachers' planning and instruction, has a greater chance of influencing teaching practices and, in turn, leading to gains in student learning" (2009, p.9). The proposed professional development will actively support teachers in "prepar[ing] for their classroom practice" (Penuel, et al., 2007, p. 928) through an ongoing cycle of learning: a) Writing Project teacher-leaders model teaching units and instructional strategies for each other and other teachers; b) teachers "try on" the teaching units and strategies modeled in their own classrooms; c) teachers collect and collaboratively analyze samples of student work using formative assessment tools; d) teachers, in collaboration with Writing Project teacher-leaders, will revise, adapt, and create new materials over time; and e) teachers will collaboratively problem-solve using this iterative cycle. NWP's research-based approach reflects teachers' beliefs about the types of professional development that are most helpful in implementing college- and career-ready standards: 89% of respondents to a recent survey identified collaborative planning and 70% identified job-embedded training or coaching as effective (Education Week Research Center, 2014).

Finally, the professional development will be **facilitated by teacher-leaders** who are effective teachers of writing in their own classrooms (Whyte, 2011). It will draw on teacher-developed, teacher-tested curriculum and assessment tools that are well aligned with college- and career-ready standards. These hallmarks of NWP's professional development will resonate with participating teachers who report turning to colleagues for trustworthy resources and approaches to teaching (Education Week Research Center, 2014).

Intensity and Duration. Teachers at high-need middle and high schools participating in the CRWP will actively engage in 80 or more hours of local professional development programs

over two years, with a minimum of 40 hours per year. This intensity and duration of professional development is commensurate with findings from well-designed experimental studies that identified “a set of programs which offered substantial contact hours of professional development (ranging from 30 to 100 hours in total) spread over six to 12 months showed a positive and significant effect on student achievement gains” (Yoon, 2007, cited in Darling-Hammond, et al., 2009, p. 9). Similarly, studies of NWP professional development focused on improving academic writing with similar duration demonstrate a positive impact on student writing (Kim, et al., 2011; Olson, et al., 2014; Swain, Graves, & Morse, 2006).

Competitive Preference Priority 2: Improving Efficiency

National CRWP Learning Opportunities Ensure Professional Development Integrity.

Because NWP employs an adaptive professional development model (Rowan & Miller, 2007), ensuring implementation integrity, alignment, and fidelity is critical. In particular, CRWP’s web-based resources help ensure integrity. These include the instructional and assessment materials described in B.2. as well as archived webinars that engage local Writing Project sites and teachers in planning how to use these instructional materials. These OERs enhance the efficiency of the work by building on high-quality existing resources and enhancing local expertise with national resources.

NWP supplements these OERs to ensure integrity of implementation through its peer accountability and technical assistance model. Participating Writing Project sites and schools will receive technical assistance from a national leadership team made up of site leaders and NWP staff with demonstrated expertise in leading this type of professional development. Technical assistance will continue throughout the program and includes: visits to local sites; at least three webinars per year; a launch meeting for key leaders of participating sites; and two

national meetings where local Writing Project and school teams will engage with CRWP tools and participate in peer review of local professional development implementation. Through this process, local Writing Project sites, NWP, and schools will collectively identify and address needs for modification and opportunities for enrichment in the professional development plans.

B.4. Prepare for Shortages in Fields

This project seeks to address the gap between the rigorous expectations of college- and career-ready standards in writing and teachers' current level of preparation to teach the sophisticated skills involved in crafting arguments based on analysis of complex texts and data. The 2011 NAEP exam showed that only 27% of middle and high school students attained proficient or advanced scores on writing. Results for economically disadvantaged students reveal a substantial gap: only 12% of eighth-graders who were eligible for FRPL achieved proficient or advanced in contrast with 37% of their more advantaged peers (National Center for Education Statistics, 2011). A recent survey of 1,000 teachers indicates that although teachers find new assessments such as PARCC to be well-aligned with rigorous standards and of higher quality than previous state assessments, "they may require knowledge that students don't yet have" (Teoh, Volbrecht, & Savoy, 2015, p. 1). Qualitative comments on this survey suggested that the English Language Arts exams may be too difficult given students' current level of preparation.

After nearly a decade of accountability focused almost exclusively on reading and math scores, writing receives scant attention in today's secondary curriculum (Applebee & Langer, 2013). At baseline, teachers teaching English Language Arts in districts currently involved in NWP's College-Ready Writers Program reported devoting little time to teaching writing in general, with only 13% asking students to write for the purpose of persuasion or argument (Park, Arshan, Harbatkin, & Murphy, 2014). Teachers themselves may not feel fully prepared to teach

more rigorous writing standards. Thus while there may be no shortage in the *number* of certified English Language Arts teachers, there is a critical shortage in teachers fully prepared to teach the types of writing that will prepare young people for success in college. These shortages are particularly acute in communities with the greatest need.

B.5. Addressing the Needs of Disadvantaged Individuals

Competitive Preference 4: Support High-Need Students

This project is designed to prepare high-need students for the demands of successfully completing college, establishing a career, and participating in our democracy. This project aims to improve middle and high school students' skill in writing arguments through their teachers' participation in CRWP Advanced Institutes and High-Need Professional Development, as well as through pilot Youth Institutes. This work will target teacher-leaders at Writing Project sites and teachers in high-need schools in 35 states that currently include a measure of source-based writing in their testing system.

Teacher-leaders. Developing teacher-leaders who work with traditionally underserved students is critical to preparing these students to meet college- and career-ready writing standards. In SEED-funded Invitational Institutes, building on previously successful efforts, NWP will recruit 1,100 teachers (66.7%) who work in schools with high concentrations of students living in poverty. In CRWP Advanced Institutes, NWP will recruit 1,012 (75%) of participants from schools serving concentrations of students living in poverty. These targets are attainable given that substantial numbers of NWP teacher-leaders serve economically and linguistically diverse students. For example:

- In 2014, two-thirds of Invitational and Advanced Institute participants worked in Title I-eligible schools.
- Of the 3,785 teacher-leaders participating in these activities in 2013-14, approximately 299 (7.9%) worked in districts that were eligible for Rural Education Achievement

Program (REAP), which provides rural districts with funding to help them meet academic achievement.

- Over the past five years, 74% of teachers who participated in an Invitational Institute have taught in classrooms with at least one English Language Learner, and 26% of teachers have worked in classrooms where at least 20% of their students are ELLs.

High-Need Schools. NWP will work with local Writing Project sites to recruit 50 middle and high schools that serve 50% or more students who are eligible for Free or Reduced-Price lunch. Thus all schools in this strand will serve high concentrations of students living in poverty. In addition, depending on the service area where eligible Writing Project sites are located, sites will work with schools that are eligible for the Rural Education Achievement Program, or schools that serve concentrations of English Learners. NWP sites have a consistent track record of providing intensive professional development to teachers in high-need schools. Across 2012-13 and 2013-14, 59% of the schools (857 of 1,445) participating in intensive professional development served 50% or more FRPL-eligible students. Approximately one-quarter of the high-need schools in which we work serve concentrations of English Language Learners.

Table 2. Number of High-Need Schools Receiving 30 or More Hours of NWP Professional Development¹

Year	Schools (n) ²	Educator Participants (n)	Hours per Educator Mean (SD)	Schools Eligible for REAP n (%)	Schools w/ > 20% English Learners n (%) ³
2012-13	529	4,802	59.6 (38.6)	88 (16.6)	138 (26.1)
2013-14	441	4,069	53.1 (33.2)	107 (24.3)	104 (23.6)

¹ A High-Needs School is defined as 50% or more of a school’s student population being eligible for Free or Reduced-Price Lunch as of 2012-13.

² These numbers represent an undercount of high-need schools receiving intensive NWP professional development. Because NWP’s reporting year runs from September 1–August 31, schools that received some professional development in the summer prior to the school year and some during the school year are excluded from this count.

³ Through funding from the CRWP i3 Validation Grant, NWP was able to increase the number and proportion of REAP-eligible schools where sites offered intensive professional development between 2012-13 and 2013-14.

C. QUALITY OF THE MANAGEMENT PLAN AND PERSONNEL

C.1. Qualified Personnel

The proposed SEED project will be managed by the NWP national management team, which has wide-ranging experience innovating with, providing technical assistance to, and monitoring implementation efforts across the network of NWP sites and in a wide range of school settings and communities. The team has extensive experience with ongoing program implementation, monitoring, and evaluation and with the dissemination of resources and strategies to enhance teacher knowledge and expertise. (See Appendix A for full resumes.) The team works collaboratively and meets bi-weekly to review and monitor overall progress and effectiveness, discuss critical needs or challenges, and plan for the future. Each member works with additional staff to conduct and support the proposed program of work and to coordinate the effort with site leaders across the network. Each local Writing Project site also has a leadership team that functions to guide the work on the ground. Our qualifications and roles follow.

Dr. Elyse Eidman-Aadahl is NWP Executive Director. She provides overall direction and leadership to the NWP senior leadership team. Under her direction, NWP has forged significant partnerships with a diverse set of organizations that support youth development and learning opportunities. She has designed a wide range of NWP national programs, including the organization's extensive digital media programs. She has three decades of experience holding leadership positions in education at both the high school and university level, and holds a Ph.D. in Curriculum Theory from the University of Maryland, College Park.

Judy Buchanan is NWP Deputy Director. Her experience includes more than three decades of leadership in urban education, including 20 years of teaching in high-need schools. She holds an M.A. from Temple University School of Education. She will be responsible for the

coordination and monitoring of the SEED project, co-leading external dissemination efforts, and providing reports to the U.S. Department of Education.

Dr. Linda Friedrich is NWP Director of Research and Evaluation. She has more than two decades of research experience with school-reform organizations, including more than a decade at the NWP. She holds a Ph.D. from the Stanford University School of Education in Administration and Policy Analysis. She will oversee internal program data collection and formative assessment activities for CRWP, and serve as the primary liaison to the independent evaluator.

Joye Alberts is Director of Site Development for NWP. She will be responsible for leading technical assistance to support local sites' implementation efforts of the CRWP, particularly professional development in high-need schools and the design of cross-site learning opportunities. She has over three decades of teaching experience at the secondary and university levels. She holds an M.Ed. from the University of Oklahoma School of Education.

Dr. Tanya Baker is Director of National Programs for NWP. She has designed significant new blended learning opportunities for teacher-leaders across content areas, including science. She will be responsible for leading the development and further dissemination of the CRWP Online Learning Experiences and disseminating lessons learned from the Science and Literacy leadership development institutes. She has more than two decades of experience in education, including 12 years as secondary school teacher. She holds an Ed.D. from the University of Maine.

Barbara Hasselbach Boyle is NWP Director of Grants and Contracts. She has more than 15 years of experience in nonprofit management. She provides budgetary technical assistance to

local sites to ensure their compliance with sub-award guidelines. She will provide oversight of the Request for Proposal (RFP) process for SEED sub-awards and contracts.

Patrick Sweeney is NWP Director of Finance. He has more than two decades of experience in nonprofit financial management. He holds a B.A. in Economics from the University of California, San Diego. He will provide overall budgetary oversight and provide all required financial reports to the U.S. Department of Education.

SRI International will serve as the independent evaluation contractor with H. Alix Gallagher, Ph.D., Katrina Woodworth, Ed.D., and Nicole Arshan, Ph.D. serving as co-principal investigators. Dr. Gallagher's leadership experience includes major studies on teacher professional development that use experimental and quasi-experimental designs to estimate the effects of interventions on teacher and student outcomes. Dr. Woodworth has a long record of research on K–12 school reform efforts and experience leading large, mixed-methods research studies. Dr. Arshan specializes in causal design and experimental and quasi-experimental evaluation of education interventions.

PROJECT MANAGEMENT PLAN AND TIMELINE	Year of Program Quarters	October 2015 – September 2016				October 2016 – September 2017				October 2017 – September 2018			
		F	W	S	S	F	W	S	S	F	W	S	S
		Maintain the high quality of the National Writing Project model (EEA, JB)											
NWP Management and Senior Leadership Team hold quarterly meetings to monitor progress toward goals, program data and budgets (EEA, JB, LF, PS, TB, JA, BHB)	■	■	■	■	■	■	■	■	■	■	■	■	■
Goal 1: Increase the number of teacher-leaders (JA, BHB)													
RFP & selection of Writing Project sites to lead Invitational Institutes, Cohorts 1 and 2 (JA, BHB)		C1				C2							
Support Invitational Institute Design at 75 Writing Project sites, Cohorts 1 and 2 (JA)			C1	■	■	■	C2	■	■	■			
RFP & selection of Writing Project sites for CRWP Advanced Leadership Institutes, Cohorts 1 and 2 (JA, BHB)		C1				C2							
Support the adaptation of the design of CRWP Advanced Leadership Institutes, Cohorts 1 and 2 (JA)			C1	■	■	■	C2	■	■	■			
Quarterly progress monitoring of site implementation by senior team; technical assistance as needed	■	■	■	■	■	■	■	■	■	■	■	■	■
Goal 2: Improve middle and high school teachers' practice in teaching source-based argument writing													
Goal 3: Improve middle and high school student academic writing achievement (TB, JA)													
Support CRWP Advanced Leadership cohort 1 sites in establishing 50 high-need school partnerships (JA, LF)			■										
Refine CRWP web-based materials (LF, TB, JA)	■	■											
Support the implementation of PD in 50 high-need middle and high schools to ensure high quality PD (TB, JA)					■	■	■	■	■	■	■	■	■
Support the design of the pilot youth summer institutes for cohorts 1 and 2 (TB)							C1	■				C2	■
Quarterly progress monitoring of site implementation by senior team; technical assistance as needed	■	■	■	■	■	■	■	■	■	■	■	■	■
Goal 4: Expand teachers' access to high-quality learning through blended professional development and OERs (EEA, TB)													
Support design and development of CRWP Online course with Teaching Channel (EEA, TB)				■	■	■	■	■	■	■	■	■	■
Sustainability (JB, TB)													
Disseminate resources, (e.g., NWP Radio, publications, Assignments Matters Task Jam, conference presentations, etc.) (EEA, JB, TB, JA, LF)			■	■	■	■	■	■	■	■	■	■	■
Disseminate CRWP tools and PD designs at the NWP Annual Meeting (LF, JA)	■				■				■				
Disseminate lessons learned from <i>Improving Science Writing Program</i> at a national conference (TB)									■				
Evaluation (LF)													
Leadership: ISI and Advanced Institute surveys collected and reported (LF)				■		■	■	■		■	■	■	■
Leadership and High-Need Schools: Site Profile data collected and reported (LF)			■		■	■					■		
CRWP RCT1 & 2: Design and pilot measures and recruit study participants (SRI, LF)	■	■	■										
CRWP RCT 1 & 2: Randomize 20 participants' classes and collect teacher and student data (SRI)					■		■				■		
CRWP RCT 1 & 2: Reporting and Final Dec. 2018 (SRI)				■				■					■
PE: Teacher Effectiveness Measures Analysis (SRI, LF)									■				■
Formative Writing Assessment & AWC Scoring Exchange (LF)					■	■	■	■	■	■	■	■	■
EEA: Elyse Eidman-Aadah; JB Judy Buchanan; LF: Linda Friedrich; PS: Patrick Sweeney; TB: Tanya Baker; JA: Joye Alberts; BHB: Barbara Hasselbach Boyle. SRI: SRI International.													

C.3. Sufficient Resources

NWP has decades of experience working with a networked infrastructure of local Writing Project sites, anchored at colleges and universities across the country. NWP also has a consistent track record of effectively managing programs and project evaluations across a variety of federal and private foundation-funded projects. Each local Writing Project site has a leadership team that supports intensive summer professional development and academic year follow up. Local Writing Project sites also have extensive experience in participating in national, networked learning opportunities to develop and disseminate new programs at the local level. These NWP structures and models for working at the national and local level have been well documented over several decades of research (Lieberman & Wood, 2003; McDonald et. al., 2004; Whitney & Friedrich, 2013; Stokes, 2010).

Based on the proven effectiveness of NWP's teacher leadership professional development model and our significant experience operating at scale as a national network, we are confident that we have allocated sufficient and reasonable resources to effectively carry out the proposed project. NWP will use both internal systems and external evaluators to carry out the SEED project evaluation. The budget includes \$499,788 for an independent evaluation contract with SRI and an additional \$250,000 for scoring and formative assessment activities in NWP's budget, exclusive of research staff.

D. SUSTAINABILITY

The SEED Project focuses on further refinement and scaling up of NWP's comprehensive program to impact Writing Project teacher leadership capacity and program implementation of standards-aligned tools and resources. It has been designed to build long-term

capacity and results, to yield findings and OER products that are useful to others, and to broadly disseminate resources and outcomes.

D.1. Impact Beyond the Grant Period

Leveraging and Sustaining a National Improvement Infrastructure. The NWP model is a school-university partnership model. Beyond the three-year SEED project, the NWP network of 185 university-based sites will continue to build a broad base of public and private support, generating additional revenues based on our demonstrated ability to develop and deploy effective teacher-leaders in service of influencing their profession, their schools, and their students. NWP will also disseminate lessons learned from the SEED project throughout the NWP network and will incorporate these findings into future initiatives.

Building Teacher Leadership Capacity Across the Country. By the end of the 2017-18 academic year, 3,000 additional NWP teacher-leaders will be directly reaching 280,000 students across the country. The 1,350 teacher-leaders, who will participate in CRWP Advanced Institutes, will also continue to disseminate and employ CRWP instructional practices and tools in their classrooms and through leadership of professional learning opportunities for other schools and districts. Together these teacher-leaders will be well positioned to provide high-quality professional development programs both face-to-face and online.

Investment in the development of teacher-leaders through the Writing Project helps to retain teachers and serves schools and districts more broadly over time. Data collected through NWP's Legacy Study, which surveyed 5,512 individuals who participated in Invitational Summer Institutes (ISIs) between 1974 and 2006, demonstrates that 77% of teachers remain in the classroom for at least two years following the ISI and 97% remain in the field of education. On average, teachers who participate in the ISI teach for 22.7 years. Similarly, an independent,

quasi-experimental study comparing teachers participating in Courage to Teach (CTT) with NWP teachers, in which NWP teachers served as the counterfactual, found that NWP teachers had slightly higher levels of professional engagement on two indicators of the Malasch Burnout Inventory than CTT teachers ($d=.12$). Descriptive analyses showed that NWP teachers planned to remain in teaching, with not a single respondent planning to leave the profession as soon as possible and only 3.3% of the sample saying they would leave if a better opportunity emerged (Geil, 2011). In addition to remaining in the classroom for extended periods, Writing Project participants who leave the classroom play a variety of leadership roles in education with 3.2% becoming school administrators, 3.1% playing district leadership roles, and 11% working in higher education, often in teacher education.

D.2. Impact Beyond Grantee Organization

This SEED project will produce and make accessible new tools, resources, and research findings related to effective teacher professional development and student learning. These OER products will support organizations and individuals working in partnerships at the local, state, and national level to support students, particularly those with the highest need, in reaching college- and career-ready standards.

College- and Career-Ready Aligned Resources. NWP's two-fold strategy in its development of online learning experiences (OLEs; see Appendix E) has been to increase reach and to improve cost effectiveness of professional development. NWP materials, including CRWP institute designs, tools, and resources, are and will continue to be OERs, available through NWP platforms, including the NWP website (www.nwp.org) and Digital Is (<http://digitalis.nwp.org>).

NWP will also design and develop an eight-week CRWP course with the Teaching Channel, deliverable through their online course system. Teaching Channel is a nonprofit, online teacher collaboration site and video repository that aims to change the way teachers learn to improve student achievement. The Teaching Channel online platform combines the analysis of video and teacher collaboration to serve as essential drivers for accelerating teacher growth. TeachingChannel.org has 670,000 registered users, and another 45,000 educators working on its collaboration platform, TEAMS. By filming the classrooms of six highly effective teacher-leaders from CRWP, we can leverage the work of CRWP, and NWP leadership development more broadly, and connect NWP teacher-leaders to new audiences of educators. The broad national audience for the Teaching Channel makes this a cost-effective investment. Working with the Teaching Channel, NWP will collect teacher participation and survey data for the pilot implementation to learn more about effective strategies for professional learning across a wide-variety of platforms.

In addition, 20 NWP sites will engage a total of 1,000 teachers during two, one-day NWP Assignments Matter Task Jams to develop and share standards-based assignment tasks that focus on developing source-based arguments in 2017-18. This design builds on an initial successful NWP Assignments Matter Task Jam launched in January 2015 and supported by the Bill & Melinda Gates Foundation. (See Appendix E.)

Sustained Professional Learning Opportunities. To date, our most successful, fully online learning venture has been the #CLMOOC (Connected Learning Massive Open Online Collaboration) which served 2,000 participants over two, six-week summer cycles in 2013 and 2014 and will be offered again in summer 2015. Teachers are engaged and excited to collaborate in online environments when those collaborations take place across multiple, well-known

platforms; when the material is engaging and challenging; when the learner experience is social and provides the opportunity for self-expression; and when there are just-in-time opportunities that allow teacher participants to also access the professional development experience asynchronously. NWP will incorporate new tools and research findings as we continue to offer these open online collaborations to educators across the country.

D.3. Dissemination of Outcomes

NWP will disseminate outcomes and results across the NWP network of sites and to educators who work with youth in a variety of settings, including schools, museums, libraries, and after-school programs, through our social media channels and our 44 Educator Innovator partners. (See Appendix E.) We, along with SRI International, will also disseminate these outcomes to external audiences and the field in general through publications and conference presentations.

Internal – NWP Network. Each November, NWP teacher-leaders and university faculty offer workshops for their peers via the NWP Annual Meeting. In each year of the project, we will share lessons learned and outcomes through a series of workshops and plenary sessions at the Annual Meeting. These will include CRWP tools, resources, and professional development designs, as well as other standards-aligned resources, such as those from the *Improving Science Writing Program*, supported by a previous grant (Award #U367D130003). In 2017, the NWP Annual Meeting workshops will also include the design and outcomes from the initial pilot of the Youth Summer Writing Institutes.

We will also share outcomes through NWP Radio, NWP's bi-weekly radio program. The audience for these programs includes internal and external participants. Over the past two years, NWP Radio programs have been downloaded as podcasts over 50,000 times. Episodes cover a

broad range of current topics and programs of interest to educators, such as “Creating a Culture for Learning in High-Need Schools” which aired on May 30, 2013. (See Appendix E for a selected episode list.)

External Partners and Other Audiences. NWP will disseminate effective practices, resources, research results, and lessons learned at education conferences across the country including the American Educational Research Association (AERA), the Association of Science-Technology Centers (ASTC), South By Southwest Education (SXSWedu), and Teaching & Learning.

NWP will host a national one-day conference in November 2017 following the NWP Annual Meeting to highlight the lessons learned from the *Improving Science Writing Program (ISWP) – Science Writing Tasks for Middle-Grade Students*. The focus of the conference will be to disseminate lessons learned about the role of argument writing in teaching and learning science and teacher practices that support middle-grade students’ abilities to engage in scientific argumentation. Participants in ISWP have created, vetted, taught, and studied the results of nearly 50 science writing tasks enacted in their science classrooms. With the support of SRI, the conference will disseminate tools and methodological approaches to investigate the teaching and learning of science argument. The conference will provide teacher teams from high-need middle and high schools with an opportunity to learn about the role of argument writing in teaching and learning science; to learn about and experience teacher practices that support students’ abilities to engage in scientific argumentation; and to try out and take home field-tested writing assignments as well as tools and heuristics for responding to student work.

New Publications. NWP will also continue to disseminate effective standards-aligned resources through new publications whenever possible. Recent books co-published with

Teachers College Press include: *Reading, Thinking, and Writing About History: Teaching Argument Writing to Diverse Learners in the Common Core Classroom, Grades 6-12* (Monte-Santo, De La Paz, & Felton, 2014); and *Helping English Learners to Write: Meeting Common Core Standards, Grades 6-12* (Olson, Scarcella, & Matuchniak, 2015).

E. EVALUATION

The NWP is committed to documenting the impact of its work on teachers' practices and student writing achievement through rigorous, independent research, and to using what it learns to enhance its ongoing work and inform the field. Currently, SRI International is conducting a cluster randomized trial that examines the efficacy of NWP's College-Ready Writers Program, as part of NWP's i3 Validation Grant (Award #U411B120037). This study investigates the impact of NWP's work with middle and high school teachers in 44 high-need rural districts located in 10 states. The professional development is designed to support the implementation of the CCSS in writing for grades 7-10 and requires NWP sites to provide 90 hours of professional development over 2 years to 80% of seventh through tenth grade teachers in these districts. Final results will be available in spring 2016.

The evaluation for this SEED proposal involves four components: tracking and analysis of participation in teacher leadership, high-need school professional development, and dissemination activities (2015-18) (Goals 1, 2, and 4); a cluster randomized trial focused on a one-year version of CRWP (RCT1, 2016-17) (Goals 2 & 3); a randomized controlled trial that tests CRWP classroom implementation with and without sustained attention to peer response and revision strategies (RCT2, 2017-18) (Goals 2 and 3); and the development, collection, and analysis of teacher effectiveness measures (PE, 2015-18) (Goals 1, 2, and 3). NWP's Research and Evaluation Unit and SRI International will carry out these activities as specified below.

Internal Evaluation Activities | NWP

To determine the numbers of educators and youth participating in all SEED-funded activities, NWP will collect professional development activity data from Local Writing Project sites through its site participation system annually. Site participation data are compiled with data from NCES, along with sites' Invitational and Advanced Institute participant survey data, to prepare individual site profiles, which are available to sites for internal review and strategic planning. In addition, NWP will collect qualitative reports from sites that focus on the quality of the work and also provide evidence of the ways in which teachers and students are using what has been learned through professional development.

NWP fields annual surveys of all teachers who participate in Invitational Institutes. This survey collects data on participants' demographics and current employment information (which will be linked to NCES data), their experiences in the institute, and their perceptions of its immediate impact. Spring follow-up surveys with teachers for the two years after their initial participation track current employment information and ask teachers to report on their use of practices and strategies for teaching writing, ongoing professional development participation, and participation in leadership activities. For CRWP Advanced Institutes, NWP will collect data on teacher-leaders' effectiveness in teaching source-based argument writing. First, NWP will field and analyze the SRI-developed teacher survey described below with the 1,350 participating teacher-leaders. NWP will collect baseline measures prior to teachers' participation in the Advanced Institute and in the spring following the Advanced Institute. NWP's version will add a module on preparation for teacher leadership. NWP will also collect and analyze Advanced Institute participants' Using Sources Tool (UST) (Appendix E) data as a second indicator of teacher effectiveness.

These SEED-specific reporting activities supplement NWP’s online peer review process for site reports through the Model at Work, an interactive, curated collection of on-demand resources and programs. (See Appendix E.) Peer reviewers select descriptions of exemplary practices from each site’s report and post these practices in the Model at Work to showcase innovation design and strategic use of resources. In addition to the above, NWP staff annually review and monitor program data and site budgets and provide feedback and technical assistance where necessary. Collectively, these data analyses and reports provide performance feedback, permit periodic assessment toward achieving objectives, and allow us to understand the underlying capacity of sites to carry out the proposed work.

Independent Evaluation | SRI International

SRI International will conduct an independent evaluation of the impact of NWP’s CRWP high-need school work on classroom instruction and student achievement, focusing on Goals 2 and 3. The evaluation will be guided by a logic model (See Appendix E) that assumes that when teachers invest in intensive and sustained professional development, they will take up instructional practices that have the potential to make a difference in student learning—in this case, the use of new tools and resources designed to systematically teach students how to analyze nonfiction texts and write source-based arguments (e.g., the CRWP mini-units). These teachers will then reflect on their work through regular use of formative assessment (e.g., with the Using Sources Tool), refine their instruction, and ultimately support growth in student achievement in source-based argument writing.

The evaluation will have five research questions:

1. How much more effective is a teacher in raising student achievement in source-based argument when using CRWP instructional and assessment tools compared to his or her own business as usual practice? (Goal 3)
2. How much more effective is a teacher at raising student achievement in source-based argument writing when using a version of CRWP that includes a more extensive and structured focus on peer response and revision compared to the year-one version of CRWP? (Goal 3)
3. To what extent does CRWP support improvement in teachers' practice in the teaching of source-based argument writing? (Goal 2)
4. Do Writing Project sites consistently implement CRWP in high-need schools—in terms of content, intensity, and duration? (Goals 2 and 3)
5. Does achievement on state standardized tests of English language arts improve in high-need schools participating in CRWP? (Goal 3)

To address these questions, SRI will conduct a randomized controlled trial (RCT) with a subset of seventh and eighth grade teachers to assess the impact of CRWP on student achievement (RQ1 and RQ3) and a second RCT to determine if the year-two version of the program has a greater impact on student writing than the year-one version (RQ2 and RQ3). SRI will use multiple measures to evaluate the effectiveness of CRWP for all participating teachers (RQ3), examine CRWP implementation across Writing Project sites (RQ4), and describe student performance on state tests for all schools participating in the program (RQ3 and RQ5).⁴

The first and second research questions will be answered with separate RCTs, conducted in the 2016-17 (RCT1) and 2017-18 (RCT2) school years, respectively. The remaining research

⁴ The RCTs will focus on seventh and eighth grade teachers because students in grades six through eight participate in annual state testing in English language arts, making possible the use of state tests at the student-level as an outcome measure.

questions will be answered using a mixed-methods program evaluation (PE) approach in both school years. Because the studies (RCT1, RCT2, and PE) will have overlapping measures, we describe those first followed by the separate research designs.

Measures. SRI will rely on six types of measures, listed here and described in greater detail below.

Measure	Construct(s)
Analytic Writing Continuum for Source-based Argument Writing ⁵	Student achievement: The quality of the content and structure of students' source-based argument writing
Student-level standardized test scores in ELA	Student achievement: Student-level performance on Common Core-aligned ELA assessments
School-level standardized test scores in ELA	School achievement: School-level performance on Common Core-aligned ELA assessments
Teacher interview	Teacher effectiveness: Teachers' instructional decision making, use of CRWP instructional strategies, key supports and challenges in classroom-level implementation, and teachers' perceptions about program effectiveness
Teacher survey	Teacher effectiveness, implementation fidelity: Participation in writing professional development; use of CRWP instructional practices
Using Sources Tool (UST)	Teacher effectiveness: Teacher collection of formative assessment data required as part of CRWP program ⁶
Professional development monitoring (PDM)	Implementation fidelity: Participation/duration and content of PD

RCT1: Estimating Impacts of Year-one CRWP on Student Writing Performance. To estimate the impact of year-one CRWP instructional and assessment tools on student writing performance, SRI will randomize classes within teachers to be taught using CRWP tools and resources (treatment condition) or that same teacher's typical instruction ("business as usual" control condition). While within-teacher randomization includes some risks for contamination

⁵ The Analytic Writing Continuum for Source-Based Argument (AWC-SBA) measures four attributes of argument writing: Content, Structure, Stance, and Conventions (Appendix E). It is adapted from NWP's Analytic Writing Continuum, which achieved an overall agreement rate of 90% across 9 scoring events and has demonstrated consistency in its application across time (Bang, 2013). The AWC-SBA relies on the same scoring system as the original AWC (i.e., an analytic scoring guide, anchor papers selected by a panel of writing assessment experts, 6–8 hours of training of scorers prior to scoring, and adjudication of non-adjacent scores). A pilot scoring yielded an overall inter-rater agreement rate of 89.2%, closely approximating the agreement rates for NWP's AWC.

⁶ In an effort to move toward using the Using Sources Tool to measure student outcomes, the NWP will test the reliability and validity of the Using Sources Tool in 2015-16 and formalize the process for supporting teachers' use of the tool so that they are able to apply it reliably.

between treatment and control conditions, the nature of CRWP—which in Year 1 focuses on classroom implementation of specific tools and resources (e.g., mini-units, the Using Sources Tool, and specific strategies for teaching argument writing)—is well suited to this design.⁷

To examine the efficacy of year-one CRWP, the NWP will select six Writing Project sites for this study, which will have experience with implementing CRWP. Each site will work with one or two schools serving at least seventh and eighth grade.⁸ From these schools, the sites will recruit 20 seventh and eighth grade teachers to participate in the study. SRI will support recruitment to encourage participant buy-in, proactively prevent attrition from the RCT, and prevent and monitor contamination of the control classrooms (Roschelle et al., 2014). In fall 2016, study teachers will provide SRI with student rosters for two similar classes (ideally two sections of the same class). SRI will randomly place one class—inclusive of the students on the rosters—into treatment and the other into control. Any students leaving these classes will be considered attrition and no in-mover students will be included in the study. This RCT is therefore designed to meet WWC standards without reservations with inferences on individual student achievement.

Examining differences in student outcomes in classes where teachers implemented year-one CRWP instruction and assessment tools compared to classes in which they did not will provide evidence on the impact that year-one CRWP has on teachers' effectiveness in writing

⁷ Any contamination of the control condition (i.e., use of CRWP tools in the control classroom or change in general teacher capacity above and beyond the use of CRWP materials) would cause this RCT to underestimate the true effect of CRWP. Contamination is unlikely to eliminate enough of the difference between treatment and control teacher practices to outweigh the improved statistical power (given its ability to control for other aspects of teacher effectiveness as well as school and district context) that comes with within-teacher as opposed to between-teacher randomization (Rhodes, 2011). We will carefully select and recruit teachers who are committed to systematically understanding how their instructional practices impact student learning and are therefore motivated to prevent contamination. As incentives for participating, we will provide teachers with classroom-level data on their students' performance as well as a stipend of \$1,250.

⁸ We will focus on these grades because most states administer ELA assessments in seventh and eighth grade, but not in contiguous grades in high school.

instruction. To measure students' writing performance, all students in each study class will complete an on-demand writing sample written in response to a text-based prompt at baseline (fall 2016) and outcome (late spring 2017), which will be scored using the AWC-SBA. SRI will use the fall AWC-SBA score to check for baseline equivalence between treatment and control groups in the analytic sample.

To assess the impact of year-one CRWP on student writing achievement, SRI will estimate a hierarchical linear model (HLM) with the effect of the intervention estimated at the classroom level. HLM adjusts standard errors associated with the clustering of observations and point estimates for the different sample sizes of clusters, thus minimizing Type I error associated with nested models (Raudenbush & Bryk, 2002). The predicted academic achievement Y for student i , in classroom j , taught by teacher k as a function of classroom j 's assignment to treatment is given as:

$$Y_{ijk} = \beta_0 + \beta_1(\textit{Treatment}_j) + (\overline{\textit{Baseline}_i})\beta_2 + \beta_3(\overline{\textit{Baseline}_j}) + \epsilon_{ijk} + \gamma_{jk} + \delta_k.$$

Random effects ϵ_{ijk} and γ_{jk} allow for error at the student and classroom level, respectively. The term δ_k indicates that the model controls for fixed teacher effects, which account for both differences in teacher effectiveness and the blocked randomization within teacher. We include both a vector of student baseline covariates (β_2) including, at minimum, grade level dummies and pre-test scores, and the mean of student pre-treatment scores from each classroom (β_3) as a control to improve precision of the estimate. β_1 provides an estimate of the effect of classroom assignment to treatment (the Intent to Treat effect). We estimate that these student impact analyses will have an MDES of .19.⁹ SRI also will explore the feasibility of obtaining student-

⁹ MDES is calculated using a two-level model, assuming the top level N is 40 classrooms, with an average of 25 students per classrooms. We use estimated ICCs and R^2 s in reading, controlling for pre-test covariates and averaged across all grades from Hedges & Hedberg (2007; ICC=.138, η_B^2 =.210, η_W^2 =.434), though findings from an RCT using the same outcome provided similar estimated ICCs and R^2 s (Gallagher et. al., 2014). Attrition of 20% of both

level data linked to teachers from their districts. If this data is available to the research team, we will also estimate the impact of year-one CRWP on student standardized test scores in writing (PARCC, SBAC, or other state, college- and career-ready writing assessment).¹⁰

A key question for this design is the treatment-control contrast. For teacher surveys to achieve sufficient precision to capture differences in instruction across classes may be difficult. However, by conducting a structured interview near the end of every semester, SRI will be able to ask teachers about implementation of the year-one CRWP program in their treatment classrooms (e.g., the number of mini-units taught, how they used the data from the Using Sources Tool) and about instruction in their control classroom (e.g., what they taught while the treatment class did the mini-units, formative assessment practices).

In addition, the RCT1 will examine the extent to which each Writing Project site maintains fidelity to year-one CRWP. Each Writing Project site will complete a PDM tool that will provide data on PD attendance and the content of each PD event. Additionally, the UST data can be used to verify that teachers are submitting required student writing for ongoing formative assessment. Finally, the teacher survey will provide information on teachers' experiences with year-one CRWP and will also contain a module solely for participants in RCT1 with questions about perceived differences in instruction in treatment versus control classes.

RCT2: Estimating the Added Benefit of More Extensive and Structured Peer Response and Revision. Given the positive effects of student collaborative writing (Graham & Perin,

students and teachers would result in an MDES of .21. Furthermore, the ability to include individual student demographic characteristics through district data would reduce the estimated MDES to .17 in the full sample or .19 in the sample including 20% attrition at both levels (Hedges & Hedberg 2007; ICC=.113, $\eta_B^2=.178$, $\eta_W^2=.423$).

¹⁰ Given the unknown composition of the states and school levels included in the analytic sample and ongoing changes to state assessments, practicality precludes a predetermined plan for combining assessment scores across states and grades. SRI will follow May, Perez-Johnson, Haimson, Sattar, & Gleason (2009) to formulate an appropriate plan for converting assessment scores into z-scores and modeling impacts given the observed distribution of assessment scores in study districts in the 2015–16 (baseline) school year, though impact estimates would be adapted from the model presented for impacts on student writing ability, above. We estimate similar power for these analyses as to the student writing outcomes, above.

2007), the NWP will develop an added feature of CRWP around peer feedback on writing, implemented as year-two CRWP. SRI will assess the added benefit of this more intensive program during the 2017-18 school year, when teachers have mastered year-one CRWP practices and are more likely to be able to successfully implement a more expanded version of the program. The study will be designed much as RCT1, with classes randomized within teacher, student rosters collected prior to notifying educators of which class is assigned to which condition, and estimates of program impact made based on an HLM model with AWC-SBA as the outcome measure. SRI plans to maintain strong relationships with study teachers who participated in RCT1 to maintain as many as possible for participation in RCT2 and use PDM and survey data in RCT2 in a similar way as in RCT1.

Program Evaluation (PE): Program Implementation, Teacher Effectiveness, and Schoolwide Student Achievement. The PE study will address research questions on program implementation, CRWP influences on teacher effectiveness, and changes in ELA achievement *across all 50 high-need schools participating in CRWP*. Program implementation will be assessed across both years using PDM data (measures described above). Records of teacher participation in formative assessment practices (i.e., via the UST) will be accessed to measure teacher uptake of CRWP practices. Teachers' surveys in fall 2016 (baseline), spring 2017 (end of Year 1), and spring 2018 (end of Year 2) will serve two main purposes. First, the surveys will include a module on teachers' experiences with CRWP, which we will use to triangulate the PDM and UST data. Additionally, participants will be tracked over time to assess whether teachers more frequently use practices designed to systematically teach students how to analyze nonfiction texts and write source-based arguments as a result of the program. The UST and teacher surveys will provide multiple measures by which to assess teacher effectiveness (e.g., use

of CRWP practices in the teaching of source-based argument writing). SRI will also examine differences between beginning-of-year and end-of-year on-demand reading-writing tasks, which will be scored using the AWC-SBA, from one class of students each year. Finally, SRI will examine school-level student achievement in seventh and eighth grade ELA to see if student performance improves on state tests during the grant. While these analyses will not be causal, they will triangulate findings from other analyses of the program's contributions to teacher effectiveness.

SRI International will provide interim briefings on the evaluation for NWP in order to help assess whether the project is achieving its intended goals. For the field, the independent evaluation will provide evidence of whether two different models of CRWP (one-year and peer revision) are effective in improving students' achievement in source-based writing. This is important for schools and districts considering participating in CRWP, and could help them use resources efficiently. Programmatically, the evaluation will provide insights on the inclusion of an explicit focus on peer response and revision as well as the feasibility of implementing the CRWP across a larger number of states, schools, and local Writing Project sites.

REFERENCES

- Applebee, A.N., & Langer, J.A. (2011a). A snapshot of writing instruction in middle schools and high schools. *English Journal*, 100 (6), 14–27.
- Applebee, A.N., & Langer, J.A. (2013). *Writing instruction that works: Proven methods for middle and high school classrooms*. New York, NY: Teachers College Press.
- Bang, H.J. (2013, August). Reliability of National Writing Project's Analytic Writing Continuum Assessment System. *The Journal of Writing Assessment*, 6(1). Retrieved from <http://www.journalofwritingassessment.org/article.php?article=67>.
- Bang, H.J., Swain, S.S., & LeMahieu, P. (2012, April). *Examination of the reliability of the National Writing Project's Analytic Writing Continuum Assessment System*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, Canada.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3–15.
- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard Education Press.
- Cohen, D. K. (1990). A revolution in one classroom: The case of Mrs. Oublier. *Educational Evaluation and Policy Analysis*, 12(3), 311-329.
- Darling-Hammond, L., Wei, R.C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Palo Alto, CA: Stanford University, National Staff Development Council and the School Redesign Network.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualization of measures. *Educational Researcher*, 38 (3), 181–199.
- Education Week Research Center (2014). *From adoption to practice: Teacher perspectives on the Common Core*. Findings from a national research study. Retrieved from http://www.edweek.org/media/ewrc_teacherscommoncore_2014.pdf.
- Gallagher, H.A., Woodworth, K. R., Park, C.J., & McCaffrey, T. (2014). *Evaluating the impact of professional development to meet challenging writing standards in high-need elementary schools*. Menlo Park, CA: SRI International.
- Geil, K. E. (2011). Transformative professional development and teacher engagement. *Dissertation Abstracts International*, 72 (07). (UMI No. 3453714)

- Graham, S., Bollinger, A., Olson, C.B., D'Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide* (NCEE 2012-4058). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/publications_reviews.aspx#pubsearch.
- Graham, S., Harris, K., & Hebert, M.A. (2011). *Informing writing: The benefits of formative assessment*. A Carnegie Corporation Time to Act report. Washington, DC: Alliance for Excellent Education.
- Graham, S., & Hebert, M. (2010). *Writing to Read: Evidence for how writing can improve reading – A report from Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.
- Graham S., & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools — A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.
- Hedges, L., & Hedberg, E.C. (2007, March). Intraclass correlation values for planning group-randomized trials in education, *Educational Evaluation and Policy Analysis* (29)1, 60–87.
- Institute of Education Sciences (2012, August). WWC review of the report “A Randomized Experiment of a Cognitive Strategies Approach to Text-Based Analytical Writing for Mainstreamed Latino English Language Learners in Grades 6 to 12.” Retrieved from http://ies.ed.gov/ncee/wwc/pdf/single_study_reviews/wwc_pathways_081412.pdf.
- Kim, J.S., Olson, C. B., Scarcella, R., Kramer, J., Pearson, M., van Dyk, D. et al., (2011). A randomized experiment of a cognitive strategies approach to text-based analytical writing for mainstreamed Latino English language learners in grades 6 to 12. *Journal of Research on Educational Effectiveness* 4(3), 231-263.
- Lewis, C. (2015). What is improvement science? Do we need it in education? *Educational Researcher* 44(1), 54-61. DOI: 10.3102/0013189X1557-388.
- Lieberman, A., & Friedrich, L. (2010). *How teachers become leaders: Learning from practice and research*. New York, NY: Teachers College Press.
- Lieberman, A., & Wood, D. (2003). *Inside the National Writing Project: Connecting network learning and classroom teaching*. New York, NY: Teachers College Press.

- Marlink, J., & Wahleithner, J. (2011). *Improving students' academic writing: Building a bridge to success* (report). Berkeley, CA: National Writing Project. Retrieved from http://www.nwp.org/cs/public/download/nwp_file/15419/ISAW_LSRI_final_report.pdf?x-r=pcfile_d
- May, H., Perez-Johnson, I., Haimson, J., Sattar, S., & Gleason, P. (2009). *Using state tests in education experiments: A discussion of the issues* (NCEE 2009-013). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- McDonald, J.P., Buchanan, J., & Sterling, R. (2004). The National Writing Project: Scaling up and scaling down. In T.K. Glennan, Jr., S. J. Bodilly, J.R. Galegher & K.A. Kerr (Eds.), *Expanding the reach of education reforms: Perspectives from leaders in the scale-up of educational interventions* (pp. 81–106). Santa Monica, CA: RAND Corporation.
- MetLife (2013). *The MetLife survey of the American teacher: Challenges for school leadership*. A survey of teachers and principals. Retrieved from <http://files.eric.ed.gov/fulltext/ED542202.pdf>.
- Monte-Sano, C., De La Paz, S., & Felton, M. (2014). *Reading, Thinking, and Writing About History: Teaching Argument Writing to Diverse Learners in the Common Core Classroom, Grades 6-12*. New York, NY: Teachers College Press.
- National Center for Education Statistics (2012). *The nation's report card: Writing 2011* (NCES 2012-470). Institute of Education Sciences, U.S. Department of Education, Washington, DC.
- National Center for Literacy Education (2014). *Remodeling literacy learning together: Paths to standards implementation*. Retrieved from <http://www.literacyinlearningexchange.org/sites/default/files/2014nclereport.pdf>
- National Writing Project (2010). *Research brief No. 2: Writing Project professional development continues to yield gains in student writing achievement*. Berkeley, CA: National Writing Project. Retrieved from http://www.nwp.org/cs/public/download/nwp_file/14004/FINAL_2010_Research_Brief.pdf?x-r=pcfile_d
- Olson, C. B., Kim, J. S., Scarcella, R., Kramer, J., Pearson, M., van Dyk, D., Collins, P., & Land, R. (2012). Enhancing the interpretative reading and analytic writing of mainstreamed English Learners in secondary school: results from a randomized field trial using a cognitive strategies approach. *American Educational Research Journal*, 49 (2), 323-355. http://www.gse.uci.edu/docs/AERJ_Article_published%20version.pdf#aerj_published
- Olson, C.B., Matuchniak, T., Chung, H.Q., Stumpf, R., & Farkas, G. (2014). *Closing the writing achievement gap for secondary school Latino students and English learners*. Unpublished manuscript. Irvine, CA: University of California.

- Olson, C.B., Scarcella, R., & Matuchniak, T. (2015). *Helping English learners to write: Meeting Common Core standards, grades 6-12*. New York, NY: Teachers College Press.
- Park, C.J., Arshan, N., Harbatkin, E., & Murphy, K. (2104, April). *Evaluation of the College-Ready Writers Program: Baseline report – amended*. Menlo Park, CA: SRI International.
- Penuel, W., Fishman, B., Yamaguchi, R., & Gallagher, L. (2007) What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal*, 44(A), 921-958.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Resnick, L. B., Stein, M. K., & Coon, S. (2008). Standards-based reform: A powerful idea unmoored. In R.D. Kahlenberg (Ed.), *Improving on No Child Left Behind: Getting education reform back on track*. New York, NY: The Century Foundation Press.
- Rhodes, C. (2011). The implications of “contamination” for experimental design in education. *Journal of Educational and Behavioral Statistics*. 36 (1), 76-104.
- Roschelle, J., Feng, M., Gallagher, H., Murphy, R., Harris, C., Kamdar, D., & Trinidad, G. (2014). *Recruiting participants for large-scale random assignment experiments in school settings*. Menlo Park, CA: SRI International.
- Rowan, B., & Miller, R. (2007). Organizational strategies for promoting instructional change: Implementation dynamics in schools working with comprehensive school reform providers. *American Educational Research Journal*, 44(2), 252-297.
- Stokes, L. (2010). The National Writing Project: Anatomy of an improvement infrastructure. In C.E. Coburn & M.K. Stein. (Eds.) *Research and practice in education: Building alliances, bridging the divide* (pp.147-165). New York, NY: Rowman & Littlefield, Inc.
- Swain, S.S., Graves, R.L., & Morse, D. (2006). *The effect of Mississippi Writing/Thinking Institute professional development on the writing achievement of ninth-graders*. Berkeley, CA: National Writing Project. Retrieved from http://www.nwp.org/cs/public/download/nwp_file/10563/Mississippi_Writing_Thinking_Institute.pdf?x-r=pcfile_d
- Swain, S., & LeMahieu, P. (2012). Assessment in a culture of inquiry: The story of the National Writing Project’s Analytic Writing Continuum. In Norbert Elliot and Les Perelman (Eds.), *Writing assessment in the 21st century: Essays in honor of Edward M. White* (pp. 45-66). New York, NY: Hampton Press.
- Teoh, M., Volbrecht, S., & Savoy, M. (2015). *1,000 teachers examine PARCC: Perspectives on the quality of new assessments* (report). Chicago, IL: Teach Plus.

Whyte, A. (2011). Alabama secondary school English teachers' National Writing Project participation and own writing in relation to their organization of the classroom and to student achievement in writing (report). Retrieved from http://www.nwp.org/cs/public/download/nwp_file/15428/auburn.pdf?x-r=pcfile_d

Whitney, A. E., & Friedrich, L. (2013). Orientations: The legacy of the National Writing Project for the teaching of writing. *Teachers College Record* 115(7), 1-37.