

*Evaluating the Impact of
Professional Development to Meet
Challenging Writing Standards in
High-Need Elementary Schools*

Executive Summary

February 2014

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Executive Summary

Writing is an essential skill for participating in modern American society. Although it is crucial to careers and civic engagement, student writing falls far short of national expectations (College Board, 2004; NAEP, 2011; Persky, Daane, & Jin, 2003). Until recently, national policy, notably the No Child Left Behind Act of 2001 (NCLB), may have exacerbated the problem by focusing attention on student performance in reading and mathematics—sometimes at the expense of other academic areas (Center on Education Policy, 2005). More recently the Common Core State Standards for English Language Arts (CCSS-ELA), adopted by 45 states as of January 2014, signal the importance of writing and call for changes to the role of writing in schools.

Three major changes to instruction are implicit in the CCSS-ELA: (1) a shift in the types of writing on which instruction is focused, (2) an increasing emphasis on writing in the overall instructional program, and (3) a focus on writing (and writing instruction) across the disciplines (Calkins, Ehrenworth, & Lehman, 2012; Rothman, 2011). The shift in the types of writing seeks to increase the amount of argument and informative/explanatory writing (relative to narrative writing) in schools, reflecting the greater emphasis that both higher education and careers now place on these types of writing than narrative writing (Cutler & Graham, 2008; Rothman, 2011). Additionally, the CCSS-ELA specify that students across all grades should “write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes and audiences” (Common Core State Standards Initiative, 2010, p. 18).

The National Writing Project—a national network comprising nearly 200 university-based Local Writing Project sites—is well positioned to support educators across the country in developing knowledge and skills to change their practices to align with the CCSS-ELA.

SEED Professional Development and Evaluation

In March 2012, the National Writing Project was awarded a 1-year federal grant under the Title II Supporting Effective Educator Development (SEED) grant program. The National Writing Project used a portion of the SEED grant funds to provide intensive in-service to high-need elementary schools focused on CCSS-ELA implementation in third, fourth, and fifth grades.¹ As soon as the grant was awarded, the National Writing Project leadership team began refining the program and recruiting Local Writing Project sites; the sites in turn recruited school partners. In most cases, the professional development began in August 2012 and ended in May 2013.

The National Writing Project specified “nonnegotiables” based on research on effective professional development and an understanding of CCSS-ELA to guide Local Writing Project sites’ work on the SEED grant. These nonnegotiables included the following criteria:

- At least 75% of third-, fourth-, and fifth-grade teachers participate in at least 45 hours of SEED professional development
- Joint ongoing planning and review of professional development by site and school
- A variety of professional development delivery strategies
- A focus on supporting teachers as they work to teach to the CCSS-ELA in writing

Once Local Writing Project sites were awarded grants, site and school personnel collaborated to develop individual logic models for the intensive in-service work. Based on these logic models, representatives from the Local Writing Project sites (university faculty and teacher leaders), schools, and the National Writing Project identified additional shared components of SEED professional development. The “common agreements” included establishing common goals and language at each school for argument/opinion/persuasive writing, focusing on teaching argument, using in-class model lessons and model texts, engaging teachers in writing, examining student writing, and engaging students’ “funds of knowledge.”

¹ The SEED work initially included a focus on any college- and career-ready standards. However, all participating schools were located in states that had adopted CCSS, and so the work focused on the college- and career-ready standards adopted by the states in which participating schools were located—namely CCSS.

Local Writing Project sites maintained their usual autonomy in determining—typically in collaboration with school-based leaders—how to put these nonnegotiables and common agreements into practice in their work with participating schools.

SRI International designed an evaluation to estimate the effects of the SEED professional development on teachers' writing instruction and student argument writing, while documenting implementation of the SEED program (i.e., examining adherence to the nonnegotiables and common agreements) and attending to the contexts in which the program was implemented. The evaluation was designed as a cluster randomized controlled trial (RCT) in which 44 schools, served by 14 Local Writing Project sites, were assigned to either the treatment or control condition.² Because of the nature of the SEED funding, both the professional development and the evaluation spanned a single school year (2012–13).

Members of the SRI research team and National Writing Project staff together formalized the SEED evaluation framework. In addition to specifying the key components of SEED professional development, the evaluation framework explicitly anticipated the important role that contextual factors play in shaping teachers' existing knowledge, skills, beliefs, and practice, and their response to the professional development. These contextual factors include existing curricula, accountability policies and pressures, school leadership, and the extent of focus on the CCSS, among others. Drawing on the National Writing Project staff's vision for the SEED program as well as the recent IES *Educator's Practice Guide* on elementary-level writing instruction (Graham et al., 2012), the evaluation framework detailed the teacher knowledge, skills, beliefs, and practices and student outcomes expected to increase as a result of the SEED professional development. SRI measured the core elements of the evaluation framework through on-demand writing prompts, a teacher survey, interviews and Local Writing Project site/school visits, and professional development monitoring forms (that tracked the amount and nature of the professional development in which teachers participated).

² In January 2013, one school attrited from the study and SRI dropped its pair, reducing the final sample to 42 schools.

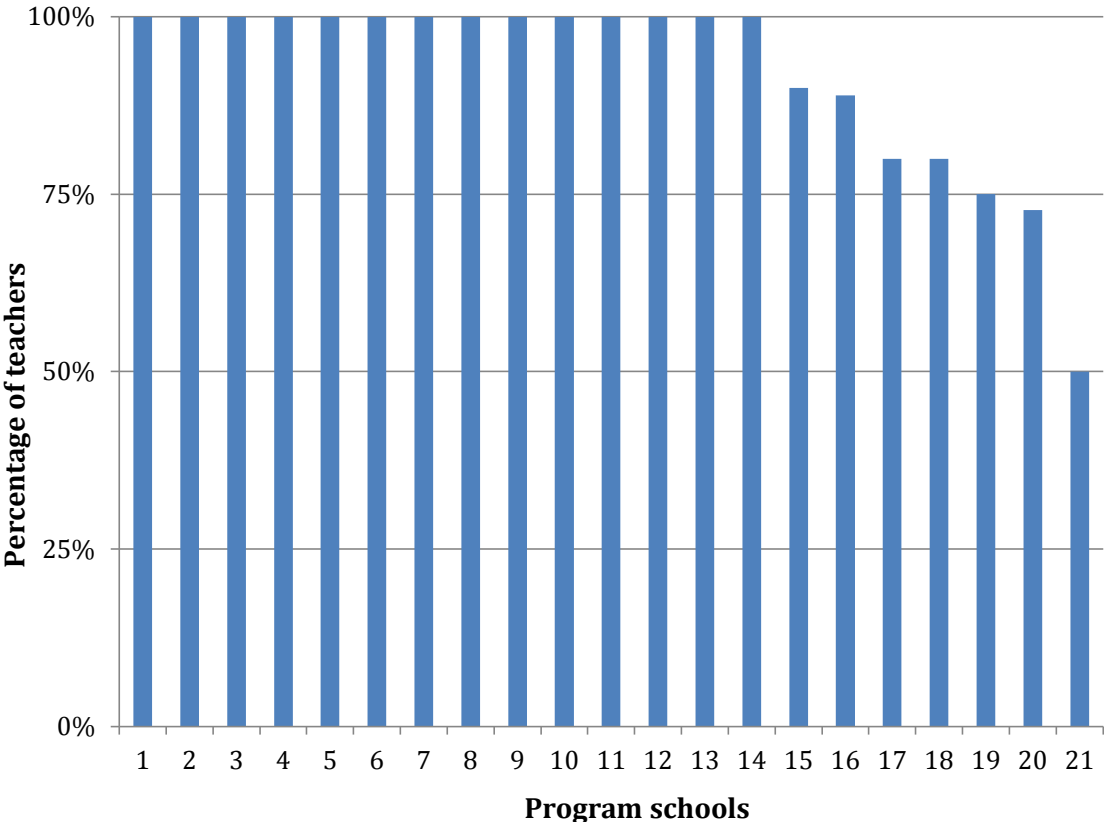
Key Findings

This summary reports key findings on SEED program implementation and the context in which it was implemented, teacher outcomes, and student outcomes.

Local Writing Project sites implemented the SEED professional development with fidelity.

The SEED program sought to provide 75% of third- through fifth-grade teachers in program schools 45 hours or more of SEED professional development. Twelve of 21 schools attained this threshold and, when the threshold is lowered slightly to 40 hours, 19 schools attained the mark (Exhibit ES-1).

Exhibit ES-1. Teachers' rates of participation in 40 or more hours of professional development, by SEED program school

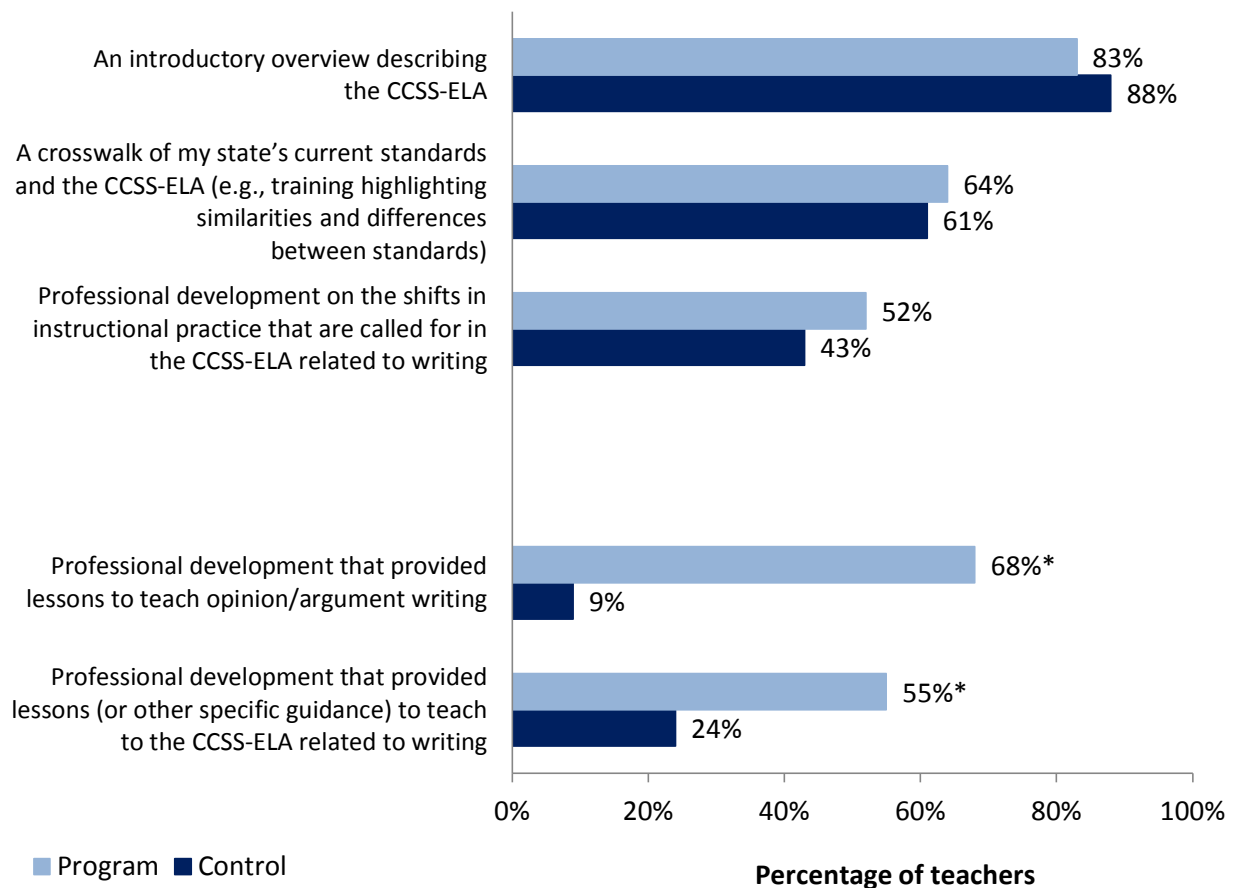


Source: Professional development monitoring.

Teachers in control schools were allowed to attend district-mandated professional development. Nonetheless, program school teachers' hours of participation in writing professional development far exceeded control school teachers' participation in writing professional development, with program teachers reporting an average of 61 hours of writing professional development compared to 8 hours for control teachers.

While teachers at both program and control schools participated in introductory professional development on the CCSS-ELA, the SEED professional development included more guidance on teaching argument writing and teaching to the CCSS-ELA related to writing (ES-2).

Exhibit ES-2. Frequency with which teachers identified CCSS-ELA foci of professional development, among those who participated in professional development on the CCSS-ELA

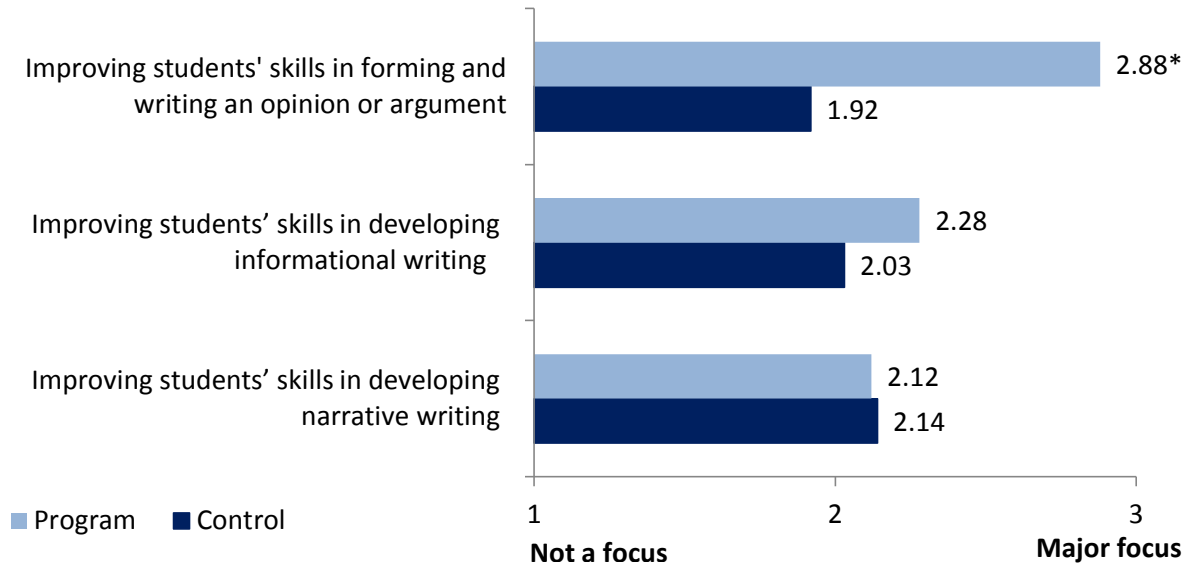


Note: * denotes a statistically significant difference ($p < .05$) between program and control groups.

Source: SEED teacher surveys.

In line with the goals of the SEED program, SEED professional development focused on argument writing to a greater extent than did professional development in control schools (Exhibit ES-3).

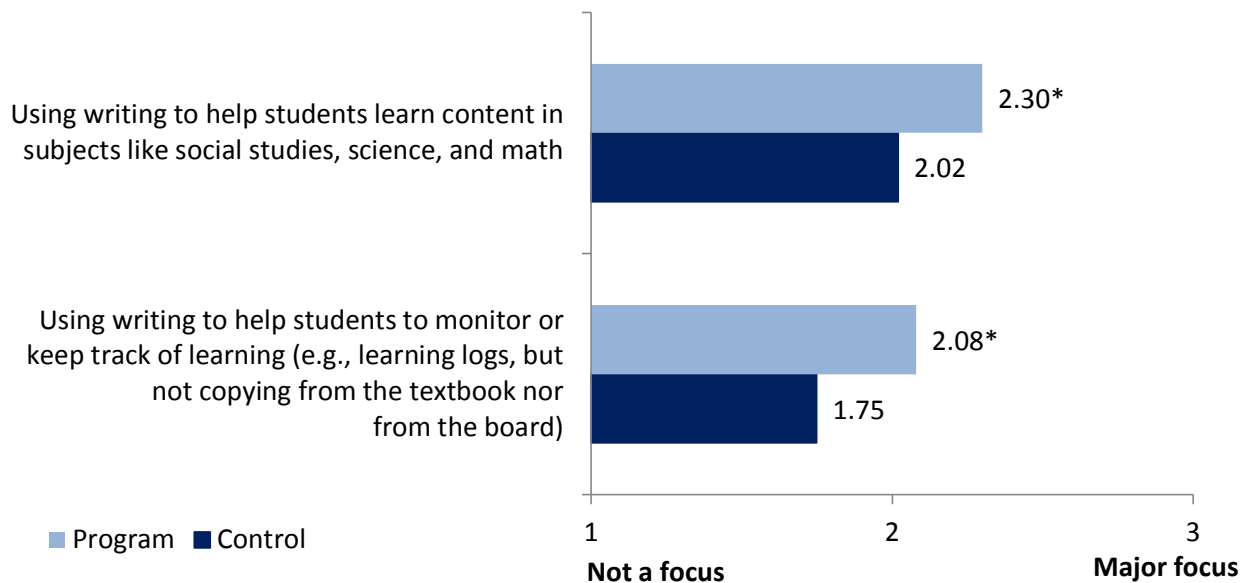
Exhibit ES-3. Teachers’ reports on the focus on types of writing in professional development (means), among those who participated in writing professional development



Note: * denotes a statistically significant difference ($p < .05$) between program and control groups.
 Source: SEED teacher surveys.

SEED professional development also reflected common, research-based Writing Project practices that were not specified in the SEED design principles but were reflected in the evaluation framework. In particular, SEED professional development focused on using writing to learn and to keep track of learning across content areas to a greater extent than did professional development in control schools (Exhibit ES-4)

Exhibit ES-4. Teachers’ reports on the focus on writing to learn and to monitor learning in professional development (means), among those who participated in writing professional development



Notes: * denotes a statistically significant difference ($p < .05$) between program and control groups.
 Source: SEED teacher surveys.

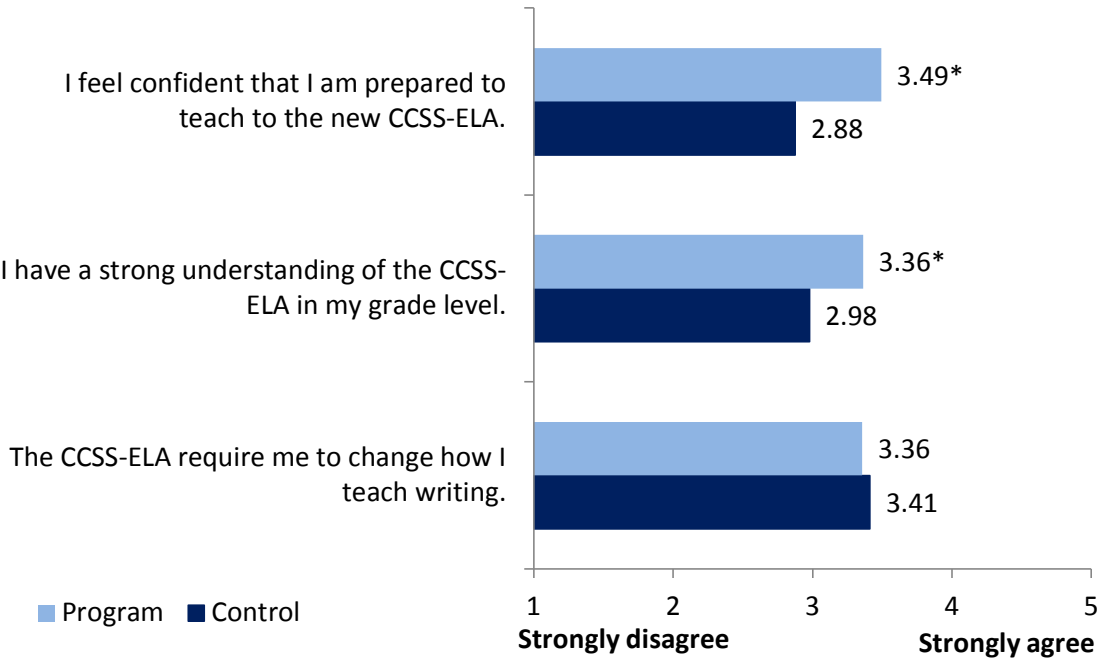
The SEED program improved teacher knowledge and confidence about the CCSS-ELA, but many teachers were unclear about the implications of the CCSS-ELA for their instruction.

In general, the extent to which the CCSS-ELA lead to improved student writing depends on teachers’ instructional practice. Prior research on policy implementation and changes in teacher practice suggests that the process by which policies influence instruction is complex and varies across individuals and contexts. For policies to impact teacher practice, teachers must first understand the policy and its implications for their practice. With their context and prior knowledge as a lens, teachers then respond to the policy in ways that may be more or less aligned with the initial intent of the policy (Lipsky, 1978; McLaughlin, 1987; Spillane, Reiser, & Reimer, 2002). Professional development can play a crucial role in helping teachers to understand new policies, revise their vision of effective instruction, and acquire the strategies necessary to implement that vision in their classrooms.

The baseline teacher survey provided a description of program teachers’ practices prior to the SEED program and suggested that writing had a relatively small place in the curriculum

at program schools in the year preceding schools' participation in SEED professional development. This finding implies that to fully implement the CCSS-ELA during the implementation year, teachers would need to make substantial shifts in their instructional practices. Importantly, while SEED professional development had positive impacts on teachers' confidence in their ability to teach to the CCSS-ELA and their understanding of how to teach to the CCSS-ELA, the professional development did not impact teachers' sense that they would need to change their practice in response to the CCSS-ELA (Exhibit ES-6).

Exhibit ES-6. Teachers' reported self-confidence in their knowledge and skills related to the CCSS-ELA (model-adjusted means)



Notes: * denotes a statistically significant difference ($p < .05$) between program and control groups.

Source: SEED teacher surveys.

Despite the positive impacts of the SEED professional development, in all cases, the averages for program schools hovered between three and four on the five-point scale, suggesting that after 1 year of SEED, teachers did not yet feel confident about the CCSS-ELA and its implications for their teaching.

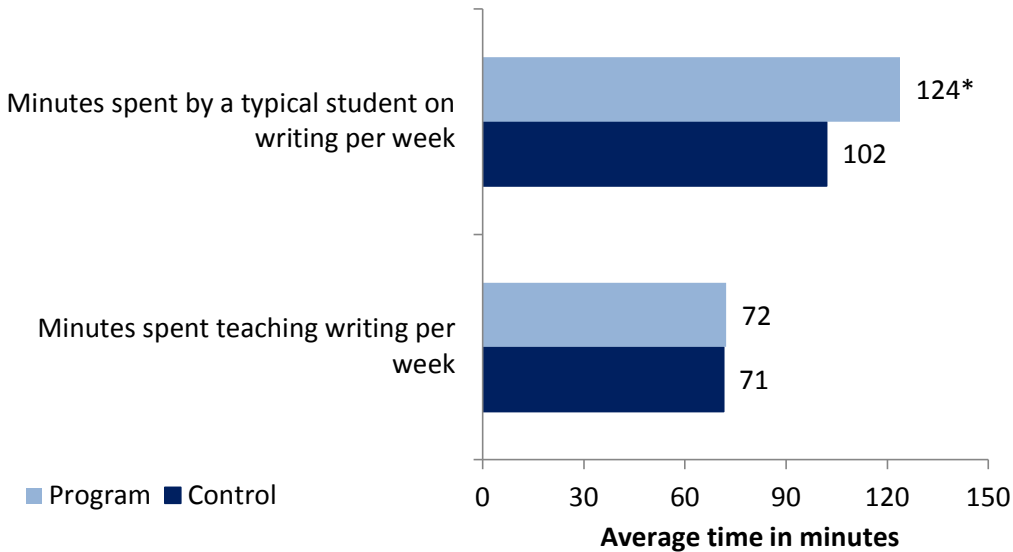
The SEED program positively impacted the amount of time students spent writing. There is no evidence of impact on the time teachers spent teaching writing, the length of student writing, or the time frame over which writing tasks extended.

The Institute for Educational Sciences' *Educator's Practice Guide, Teaching Elementary School Students to Be Effective Writers* reflects the field's current understandings of instructional practices in elementary school writing that are believed to contribute to improved student writing (Graham et al., 2012).³ *Teaching Elementary School Students to Be Effective Writers* recommends that educators provide daily time for writing—about 30 minutes of writing instruction and an additional 30 minutes for students to practice writing.

SEED professional development impacted how much time students spent writing, but not how much time teachers spent teaching writing. While SEED led to a difference of 20 minutes a week in the time teachers reported students spent writing in program schools compared to control schools, the overall amount of instructional and student practice time spent on writing was still far below recommended levels. Additionally, the cumulative difference is relatively small—if we assume a 180-day (and therefore 36-week) school year, teachers in program schools reported students spent 12 more hours writing, and received no more writing instruction, over the course of the year than teachers reported in control schools (Exhibit ES-6).

³ This report was based on a search that yielded 1,500 citations for research conducted in the last 20 years on writing instruction and strategies. Of these, 34 were both topically relevant and met What Works Clearinghouse Standards for evidence, and so formed the basis of the review.

Exhibit ES-6. Teachers' reports on minutes students spent writing and teachers spent teaching writing per week (model-adjusted means)



Notes: * denotes a statistically significant difference ($p < .05$) between program and control groups.

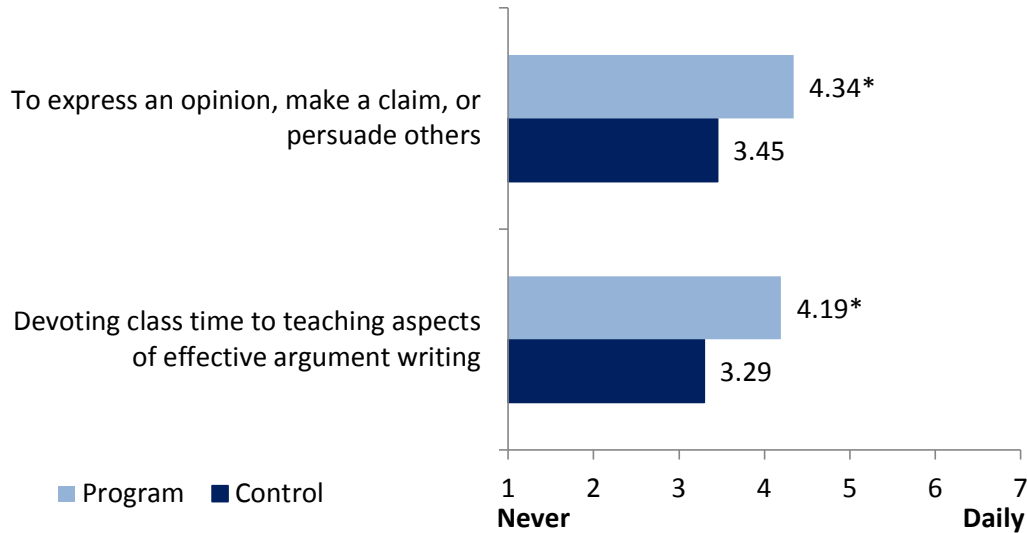
Source: SEED teacher surveys.

Furthermore, there was no evidence that SEED professional development impacted the length of student writing or students' opportunity to work on a single piece of writing over time. Interview data suggest that both the way that instructional time was divided during the school day and pressures to focus instructional time on tested subjects were major barriers to increasing the role of writing in instruction.

SEED professional development impacted the teaching of argument writing and the use of writing for broader learning. However, deeper instructional shifts may have been inhibited by contextual factors.

SEED professional development focused heavily on argument writing. Data show it impacted how frequently teachers asked students to write for the purpose of expressing an opinion or taught aspects of effective argument writing (Exhibit ES-7).

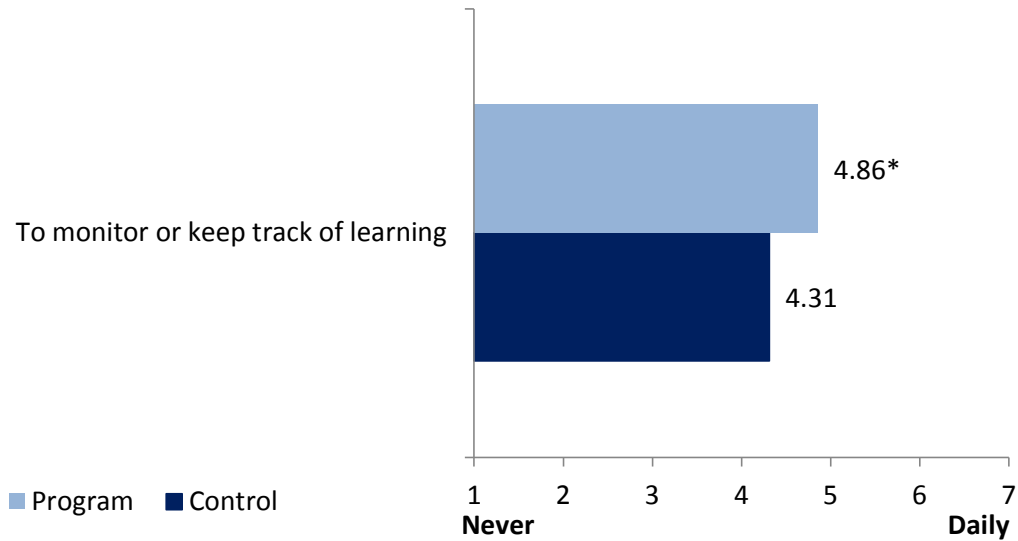
Exhibit ES-7. Teachers' reports of frequency of asking students to write opinion/argument or persuasive text and teaching aspects of effective argument writing (model-adjusted means)



Notes: * denotes a statistically significant difference ($p < .05$) between program and control groups.
Source: SEED teacher surveys

Moreover, key among the research-based practices that SEED tried to influence was teachers' use of writing as an integral part of broader learning. SEED had positive impacts on teachers' asking students to write for the purpose of monitoring learning (Exhibit ES-8) and using writing as part of larger learning activities (Exhibit ES-9).

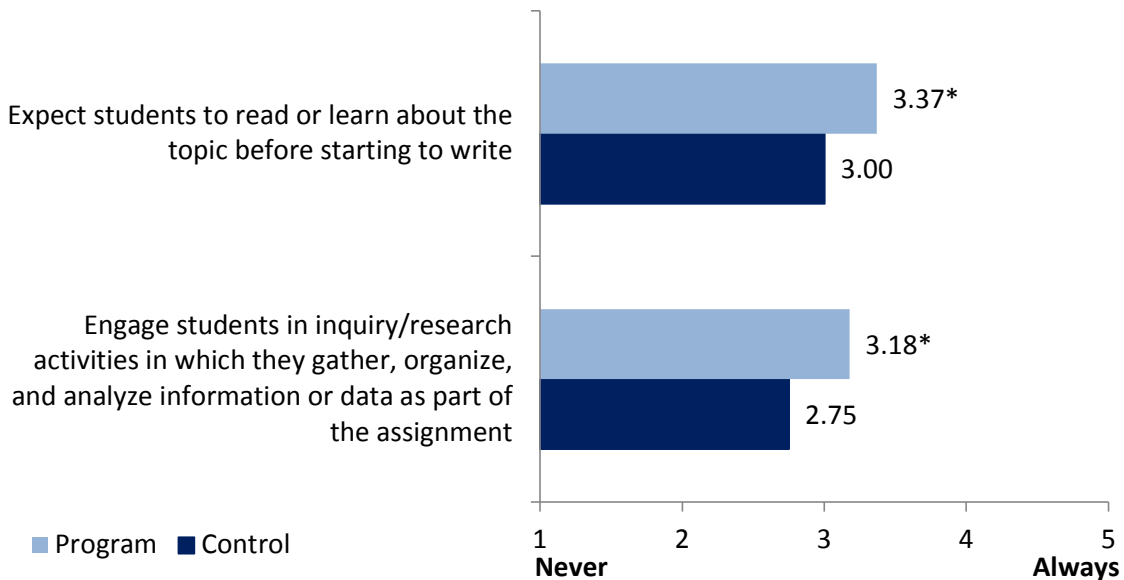
Exhibit ES-8. Teachers' reports of the frequency with which they asked students to write to monitor learning (model-adjusted means)



Notes: * denotes a statistically significant difference ($p < .05$) between program and control groups.

Source: SEED teacher surveys.

Exhibit ES-9. Teachers' reports of the frequency with which they asked students to write as part of larger learning activities (model-adjusted means)



Notes: * denotes a statistically significant difference ($p < .05$) between program and control groups

Source: SEED teacher surveys.

Teachers' reports on their instructional practices suggest that SEED impacted some practices that research suggests are critical for teaching elementary students to write. The data also suggest that teachers' instructional practices were not transformed across the board, which is not surprising for a 1-year program implemented in schools that were, in many cases, just beginning a larger process of adapting their curriculum to the new requirements of the CCSS-ELA. Some of the deeper shifts in teacher practice that may be necessary to fully meet the CCSS-ELA—for example, the amount of writing instruction teachers provide—were not impacted. The survey and interview data combine to suggest a few reasons for these mixed results.

First, teachers' instructional context put upper bounds on students' opportunities to learn to write. Most specifically, teachers felt limited by the amount of time they felt they could spend on writing instruction and (relatedly) the ways accountability pressures pushed teachers away from using that instructional time for engaging students in strategies for writing and revising longer pieces of writing.

Secondly, there was substantial variation within schools in the extent and nature of changes to instructional practice that teachers reported. Some teachers appeared more eager to change their practices than others, which is in line with general understandings of organizational change (Fullan, 2001).

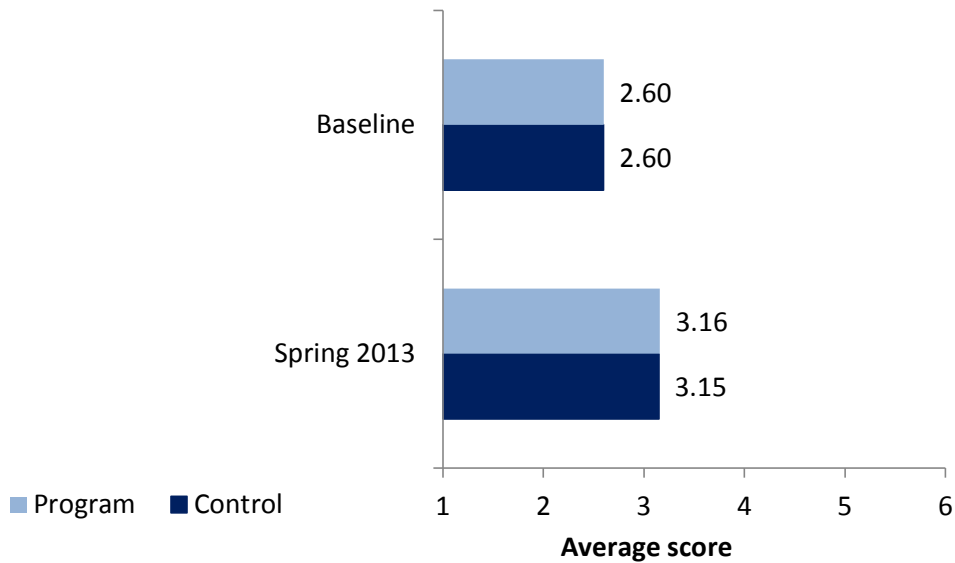
Finally, for the most part, teachers took model lessons or activities learned through their professional development and tried them in their classrooms, but they rarely took strategies from professional development and used them as the basis for revising their overall approach to writing instruction. Changes teachers made beyond implementing specific activities in their classrooms typically were those that could be made by tweaking existing practices as opposed to those that would have required larger shifts in pedagogical approaches or uses of instructional time.

There is no evidence that 1 year of SEED professional development impacted students' argument writing.

The ultimate goal of SEED is to improve the quality of students' argument writing. We conducted an intent-to-treat analysis using the "Analytic Writing Continuum (AWC)

average score,” created by averaging scores across six attributes for each student.⁴ The results can be interpreted as the mean effect on student AWC average scores for third-, fourth-, and fifth-graders caused by attending a school that participated in 1 year of the National Writing Project’s SEED grant. There was no evidence of impact from schools’ participation in 1 year of SEED professional development on the quality of student opinion writing in response to an on-demand prompt (Exhibit ES-10).

Exhibit ES-10. Students’ AWC average scores in fall 2012 and spring 2013 (averaged across third, fourth, and fifth grades) (model-adjusted means)



Notes: * denotes a statistically significant difference ($p < .05$) between program and control groups.
 Source: Student writing prompts, fall 2012 and spring 2013.

⁴ Researchers, in consultation with the National Writing Project, selected the AWC average score as the primary outcome measure because the SEED program sought to improve the overall quality of students’ argument writing (as opposed to any one particular aspect) and prior research showed a high correlation among the attributes (Bang, 2013).

Implications

This report presents data to support several positive findings about the SEED professional development and its impact on teachers' writing instruction. First, Local Writing Project sites provided professional development that was aligned with consensus in the field about the features of effective professional development (see Yoon, Duncan, Lee, Scarloss, & Shapley, 2007), was consistent with the design principles of the SEED program, and was different—more intensive and focused on opinion writing and implementation of the CCSS-ELA in writing—than the writing professional development received by the control group. In turn, the data show an impact on survey measures related to time students spent writing, teacher instruction on opinion writing, and teachers' use of writing as part of larger learning activities.

However, despite the research-based attributes of the SEED professional development and its influences on program school teachers' instructional practices, SEED professional development did not impact student argument writing as measured by on-demand prompts scored on the National Writing Project's AWC. The lack of evidence of impact on student outcomes raises the question: why not?

Looking across our data on teacher practices, what we found stands in contrast to what the writing instruction research (i.e., Graham et al., 2012) suggests students should have. At the most basic level, students did not have access to the opportunities to learn to write that research indicates they need. Interview data suggest that limited time devoted to writing is partially a legacy of NCLB (and related state and local instructional policies) and the tendency of schools to narrow the curriculum to focus on the most heavily-tested subjects. State English language arts tests have tended to focus on multiple-choice grammar and conventions questions, sometimes on short answer or constructed-response items, and less frequently on extended, nonformulaic writing. While the CCSS-ELA send different signals about writing instruction, implementation was in a very early stage and assessments were not yet aligned with the new standards.

Another element of context for this research is the short time frame of the intervention and evaluation. This study is part of a growing collection of rigorous studies of professional development that had features that mark "effective" professional development but that did not find impacts on student outcomes. It seems likely that absent a surrounding context that is highly supportive of teacher learning and change, professional development does

not alter instructional practices sufficiently and rapidly enough to impact student outcomes in less than a year.

Based on the evaluation's key findings and an understanding of the context in which the National Writing Project's SEED program was implemented, we offer implications for state and district policymakers and school leaders, professional development providers, and researchers. We frame our findings within existing research on policy implementation.

State and district policymakers and school leaders. Research suggests that teachers' decisions (e.g., to change their instructional practices in writing) are influenced by the broader system of ideas, incentives, and sanctions present in their instructional context (Smith & O'Day, 1991). This research implies that if policymakers hope to see students moving towards the CCSS-ELA in writing, they will need to change the instructional policies and expectations that currently prevent writing from taking a more prominent role in instruction. If state tests do not assess students' skills at more extended writing, teachers, schools, and districts will not have the support and pressure necessary to ensure that writing is prioritized. District-level instructional guidance that reinforces the notion of teaching disciplines in isolation is another aspect of this problem. Moreover, schools and districts need to provide teachers necessary resources, in terms of time to enhance their own learning and to redesign their instruction, materials, and the space to try out new ideas.

Professional development providers. Research on cognition and how it affects teachers' responses to substantially different ideas about instructional practices frames implications for professional development providers. Spillane et al. (2002) reviewed studies of past attempts to use standards to reform teaching to more inquiry-oriented approaches. Spillane et al.'s work suggests that a challenge for professional development providers in the early stages of this reform may be teachers' level of understanding of what instruction aligned with new standards would actually look like. Our survey and interview data indicate that many teachers were not yet confident that they knew how to teach to the CCSS-ELA; the data do not address the additional possibility that some teachers' conceptions of instruction aligned with the CCSS-ELA may differ from those intended by the policy. Professional development providers will need to help teachers envision the destination (i.e., a research-based instructional environment for student writing) as well as the path for moving from their current practices to those that are in line with the CCSS-ELA.

Researchers. Finally, this study has implications for future research. Our data clearly show that the impact of SEED professional development cannot be understood absent data on the context in which it was implemented. Given the context-related constraints for change, it might have been impossible for 45 hours of teacher professional development on writing instruction, on its own, to have measurably impacted student writing in 1 school year. Teachers started in very different places, and the barriers to deep and rapid change were so pervasive, that it is hard to imagine how teacher learning could translate into measurably improved student writing in the course of 1 school year. The implication for researchers, including those implementing randomized controlled trials, is the need to collect data not only on implementation and impact but also on context. In our study, some of the most compelling data on context was qualitative data, which many researchers collect sparsely, if at all, when conducting randomized controlled trials.

* * *

Taken as a whole, this study suggests that multiple stakeholders will need to work in concert to attain the goals that states across the nation have set for elementary students' writing. Supporting teachers to teach to these new standards—and ensuring that students master them—will require a systemic effort. While states have attempted systemic reform for two decades, we do not yet have a coherent system that sends teachers consistent messages about instruction. Moreover, we know from prior research on the implementation of new standards that achieving the CCSS will require truly aligned student assessments, a supportive teacher development system, and local leadership with a real understanding of the work involved. Finally, this study reinforces the important role that professional development can play in helping teachers develop new understandings and make the instructional changes necessary to achieve the new standards.

