Abstract Title Page

Title: Evaluation of the National Writing Project's College, Career, & Community Writers' Program (C3WP)

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Background:

The National Writing Project (NWP)'s College, Career, and Community Writers Program (C3WP) supports grade 7-10 ELA teachers' source-based argument writing instruction aligned to Common Core State Standards (CCSS). C3WP is a two-year program that provides teachers with instructional resources, formative assessment tools, and embedded teacher-to-teacher professional development. A previous RCT of C3WP found positive impacts on both teacher practice and student source-based argument writing (Gallagher, Arshan, & Woodworth, 2017).

Funded by an Investing in Innovation (i3) Scale-up grant, NWP launched a replication study of the two-year version of C3WP for grades 7-10 teachers. In addition, they developed a one-year version of C3WP for grade 4-5 teachers.

Purpose:

These findings present the effects of C3WP on grade 7-10 teachers' instructional practice after one year of implementation. We also provide qualitative implementation findings after one year of grade 7-10 implementation and as NWP prepares to launch the one-year program in grades 4-5. Student writing, used to measure C3WP's impacts on student achievement, will be scored at the programs' conclusion (summer 2020).

Setting:

The study occurs in 47 rural, high-needs rural school districts in 16 states. NWP developed C3WP and supports 17 local, university-based, site affiliates to implement C3WP in the 23 treatment districts.

Subjects:

Interview data draws from interviews with at least one local Writing Project site leaders and one teacher leader (teachers from outside the study districts trained to implement C3WP) at each of the 17 local writing project sites. Instructional log data is from 287 grade 7-10 treatment and control ELA teachers in the 47 study districts.

Program:

C3WP is defined by three components:

- *Participation duration and breadth*: 80% of teachers participate in 45 hours of C3WP professional development each year.
- *Content and resources*: Professional development focuses on argument writing from multiple non-fiction sources and trains teachers to use C3WP instructional resources and formative assessment tools.
- *Strategies*: PD focuses on classroom enactment to support classroom implementation.

To develop local capacity to implement C3WP, each Writing Project site trained local teachers (from outside the study districts) to lead C3WP training. These teacher leaders spent a year implementing C3WP in their own classrooms before supporting teachers in treatment districts. Teacher leader training began in summer 2017.

Research Design:

Forty-eight rural, high-need school districts were randomly assigned to the treatment or control condition. Randomization was blocked within local Writing Project site to facilitate implementation and balance local contextual factors. One district attritied.

Treatment districts receive grade 7-10 C3WP in 2018-19 and grades 4-5 and 7-10 C3WP in 2019-20. Control districts continue with business-as-usual and receive one year of delayed treatment for grades 4-5 and 7-10 in 2020-21.

Data Collection and Analysis:

Interviews with local and national leaders provided insight into C3WP implementation, local readiness for scaling and sustainability, and perceptions of program impacts on teacher leaders' own practice. Researchers completed a structured debriefing guide aligned with the study's research questions. During and after the period when interviews were conducted, the entire research team assembled to compare, contrast, and synthesize findings across interviewees; to identify overarching themes and initial hypotheses; to determine how these findings related to the quantitative data; and to refine analyses and assertions before reporting findings.

We use a daily instructional log to measure impacts on treatment teachers' practice. These models use a 3 level HLM model (clustering instructional days within teachers within districts). Models include block-fixed effects to account for randomization within block.

We use NWP administrative data on professional development attendance, content, and strategies to measure implementation fidelity.

Findings:

Qualitative data show that:

- All seventeen sites delivered the in-person professional development as intended, despite disruptions from weather, distance, and teacher leader bandwidth
- Successful strategies for implementing C3WP included building relationships with school and district staff, and clearly articulating to teachers and school leaders how C3WP aligns with state accountability measures and fits in to existing school or district curricular initiatives.
- The biggest challenge to elementary implementation was fitting C3WP in to district mandated curricula, pacing guides, and state standards.
- Teacher leaders reported impacts of C3WP on their own argument writing practice through a richer understanding of argument and a lower-stakes, more frequent, and skills-based approach to the work.
- Nascent practices to sustain the program included identifying teachers or other staff who can champion the work and including teachers from outside subjects or non-target grades in the professional development. Challenges to sustainability include high levels of teacher turnover and difficulty securing school leader support to invest in C3WP amidst accountability requirements.

The instructional log data show that C3WP increased the frequency with which teachers in treatment districts:

- Focus on argument
- Incorporate non-fiction as source material
- Ask students to write from four or more sources

The NWP administrative data show that C3WP was implemented with fidelity relative to the four components defined and measured:

- Development of local teacher leader capacity to implement C3WP
- Duration and breadth of partner district teacher participation in professional development
- Content and use of C3WP resources in professional development
- Professional development use of classroom enactment strategies

Conclusions:

Teachers' increased focus on argument writing, together with interview data from teacher leaders, suggests that C3WP leads teachers to teach source-based argument more frequently and in smaller, more skill-based units. In contrast, the typical "business-as-usual" practice usually assigns a single, large, stand-alone argument project. Additionally, C3WP teaches argument as a conversation between multiple viewpoints. This approach requires multiple non-fiction sources on the same topic. Accordingly, treatment teachers are more likely than control teachers to assign non-fiction source material, and to ask students to draw from 4 or more sources when writing. Teacher leaders, who are typically more experienced teachers than the treatment teachers, describe this approach as leading them to a richer understanding of argument by moving beyond "for or against" and towards a more nuanced claim.

While still underway, this study is one of only a few large-scale RCTs replicating positive impacts of teacher professional development on student outcomes at scale. As such, the findings we present will have important implications for practitioners, policymakers, and program developers.

Appendix A. References

Gallagher, Arshan, & Woodworth. (2017) Impact of the National Writing Project's College-Ready Writers Program in High-Need Rural Districts, Journal of Research on Educational Effectiveness, 10:3, 570-595, DOI: [10.1080/19345747.2017.1300361](10.1080/19345747.2017.1300361)

Appendix B. Teacher Log Impact Tables

Did you ask students to write (as defined above) during this class?	*Treatment Mean*	*Control Mean*		*Teacher N*	*Log N*
Yes	67%	60%	*	287	2180

*Answered if teacher indicated they taught a core ELA class that day. ~ p < .1; *p < .05; **p < .01; ***p < .001*

Did today's writing require students to analyze, respond to, and/or use text? (e.g., writing, images, graphics, tables, or video clips) (Select all that apply)	*Treatment Mean*	*Control Mean*	*Teacher N*	*Log N*
Yes, as source material	65%	65%	274	1395
Yes, as a model or mentor text (to demonstrate, e.g., organization, tone, convention, etc.)	19%	20%	274	1395
No	21%	19%	274	1395

*Answered if student was asked to write during the class. ~ p < .1; *p < .05; **p < .01; ***p < .001*

How many minutes did this student spend writing during class today? (e.g., planning, composing, revising, editing, publishing, and giving or receiving feedback about their own or another student's writing)	*Treatment Mean*	*Control Mean*	*Teacher N*	*Log N*
Average Minutes	30.16	28.82	274	1395

*Answered if student was asked to write during the class. ~ p < .1; *p < .05; **p < .01; ***p < .001*

Select the genre that best fits the kind of writing that the student did today. Please choose more than one genre only if student worked on multiple pieces in different genres. (Select all that apply)	Treatment Mean	Control Mean		Teacher N	Log N
Narrative (e.g., ficiton, personal memoir, etc.)	15%	10%		274	1395
Informational (e.g., summary, expository, cause/effect, etc.)	18%	33%	***	274	1395
Argument (e.g., argument, opinion, persuasive, etc.)	45%	21%	***	274	1395
Literary Analysis	17%	27%	**	274	1395
Other creative (e.g., poetry, personal reflection, cartoons, etc.)	15%	13%		274	1395
Other	7%	10%		274	1395

*Answered if student was asked to write during the class. ~ p < .1; *p < .05; **p < .01; ***p < .001*

Thinking back on all of the writing activities this student did today, what top three writing skills did they focus on? (Select up to three focus skills.)	Treatment Mean	Control Mean		Teacher N	Log N
Writing introductions and conclusions	17%	17%		274	1395
Organizing Ideas	44%	43%		274	1395
Using style, tone, and language appropriate for the audience, purpose, or genre	14%	15%		274	1395
Using words, phrases, and clauses to link major sections of the text	10%	11%		274	1395
Conventions and usage (e.g., punctuation, spelling, subject-verb agreement)	15%	22%	*	274	1395
Developing fluency or stamina	11%	8%		274	1395
Developing a controlling idea (e.g., thesis, claim)	19%	17%	~	274	1395
Revisiting a controlling idea (e.g., thesis, claim) based on feedback or self-assessment	8%	5%	*	274	1395
Revisiting a controlling idea (e.g., thesis, claim) based on new information	3%	2%		274	1395
Elaborating upon details used to support a controlling idea (e.g., thesis, claim)	18%	17%		274	1395
Annotating text	15%	11%	*	274	1395
Reading or discussing text to support comprehension	21%	27%	~	274	1395
Reading or discussing text to explore differing perspectives on an issue	13%	14%		274	1395
Evaluating the credibility of a source	4%	3%		274	1395
Selecting evidence or details from text to use in writing	30%	31%		274	1395
On-demand writing	16%	14%	*	274	1395
Other writing skills (please specify)	6%	5%		274	1395

Answered if student was asked to write during the class. ~ p < .1; *p < .05; **p < .01; ***p < .001

Did the student give or receive feedback on writing in any of the following ways today? (Select all that apply.)	Treatment Mean	Control Mean		Teacher N	Log N
Share or discuss their writing with a peer (e.g., pair-share)	45%	37%	*	274	1394
Receive written feedback from the teacher	14%	20%	*	274	1394
Receive oral feedback from the teacher	50%	45%		274	1394
Review and reflect on how to revise their own writing (i.e. individually)	21%	20%		274	1394
Use a rubric to provide feedback to a peer	5%	7%		274	1394
Use a scaffolded or structured protocol to provide feedback to a peer	3%	4%		274	1394
Give feedback to a peer without a formal rubric or structured protocol	13%	8%	~	274	1394
Other (please specify)	2%	1%		274	1394
Not applicable: student did not give or receive feedback on writing today	24%	27%		274	1394

*Answered if student was asked to write during the class. ~ p < .1; *p < .05; **p < .01; ***p < .001*

Did the student revise their writing today?	Treatment Mean	Control Mean	Teacher N	Log N
Answered Yes	29%	29%	274	1395

*Answered if student was asked to write during the class. ~ p < .1; *p < .05; **p < .01; ***p < .001*

For what purposes did the student revise today? (Mark up to three purposes)	Treatment Mean	Control Mean		Teacher N	Log N
To correct conventions or usage	42%	47%		162	405
To improve flow or fluency	30%	28%		162	405
To add details	47%	54%		162	405
To make more precise language choices	15%	19%		162	405
To use a more engaging voice or tone	6%	9%		162	405
To revisit a thesis or claim	27%	19%	*	162	405
To add examples from text	20%	19%		162	405
To review the selection of evidence	17%	13%	~	162	405
To expand commentary	21%	12%	*	162	405
To clarify reasoning	12%	16%		162	405
To improve organization	23%	17%		162	405

*Answered if student revised their writing. ~ p < .1; *p < .05; **p < .01; ***p < .001*

Did the student's argument writing (e.g., argument, opinion, persuasive, etc.) require them to analyze, respond to, and/or use text (e.g., writing, images, graphics, tables, or video clips) today?	Treatment Mean	Control Mean		Teacher N	Log N
Yes	77%	66%		165	486

*Answered if student wrote argument. ~ p < .1; *p < .05; **p < .01; ***p < .001*

Which option best describes the primary source of evidence the student was expected to use today?	Treatment Mean	Control Mean		Teacher N	Log N
Personal experience	8%	14%		146	362
Non-fiction texts (e.g., writing, images, info graphics, tables, or documentary video clips, etc.)	84%	56%	***	146	362
Fictional texts (e.g., literature, fictional images, or video clips, etc.)	7%	30%	**	146	362

*Answered if student's argument writing required analysis, response, or use of text. ~ p < .1; *p < .05; **p < .01; ***p < .001*

How many sources did this student use today?	Treatment Mean	Control Mean		Teacher N	Log N
1 source	25%	30%		136	326
2 sources	20%	39%	~	136	326
3 sources	21%	12%		136	326
4 or more sources	31%	19%	~	136	326
1 source or I Don't Know	28%	30%		136	326
More than 1 source	72%	70%		136	326

Answered if student used non-fiction or fiction texts. ~ p < .1; *p < .05; **p < .01; ***p < .001