

# Literacy Design Collaborative

## Intervention Report | Teacher Excellence Topic Area

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WHAT WORKS  
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Research has shown that teacher effectiveness is the most important school-based factor that influences student achievement.<sup>1</sup> Studies have also shown that there is substantial variation in teacher effectiveness to improve student outcomes.<sup>2</sup> *Literacy Design Collaborative* aims to help teachers improve their effectiveness in the classroom with a focus on supporting their literacy instruction. *Literacy Design Collaborative* provides professional development, coaching, and resources to support teachers to work collaboratively in their schools to create and use high-quality literacy instruction materials aimed at improving students' reading, research, and writing skills. Teachers across content areas—including English language arts, social studies, and science—can use the *Literacy Design Collaborative* program.<sup>3</sup>

This What Works Clearinghouse (WWC) report, part of the WWC's Teacher Excellence topic area, explores the effects of the *Literacy Design Collaborative* program on student achievement. The WWC identified five studies of *Literacy Design Collaborative*. Three of these studies meet WWC standards. The evidence presented in this report is from three studies of the effects of *Literacy Design Collaborative* on racially, ethnically, and geographically diverse student samples—in grades 4 through 8—in schools in Kentucky, New York City, and a school district on the West Coast.

### What Happens When Teachers Participate in *Literacy Design Collaborative*?<sup>4</sup>

The evidence indicates that implementing *Literacy Design Collaborative*:

- Has inconsistent effects on general literacy achievement.
- May result in little or no change in general social studies achievement.

Findings on *Literacy Design Collaborative* from three studies that meet WWC standards are shown in Table 1. The table

reports an effectiveness rating, the improvement index, and the number of studies and students that contributed to the findings. The improvement index is a measure of the intervention's effect on an outcome. It can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention.

The evidence presented in this report is based on available research. Findings and conclusions could change as new research becomes available.

**Table 1. Summary of findings on *Literacy Design Collaborative* from studies that meet WWC standards**

Outcome domain	Effectiveness rating	Study Findings	Evidence meeting WWC standards (version 4.0)	
		Improvement index (percentile points)	Number of studies	Number of students
General literacy achievement	Mixed effects	+1	3	31,003
General social studies achievement	No discernible effects	0	1	19,962

Note: The improvement index can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention. For example, an improvement index of +1 means that the expected percentile rank of the average comparison group student would increase by 1 point if the student received instruction from a teacher who used *Literacy Design Collaborative*. For general literacy achievement, the improvement index values are generated by averaging findings from the outcome analyses that meet WWC standards, as reported by Herman et al. (2015), Wang et al. (2018), and Wang et al. (2020). For general social studies achievement, the improvement index values are generated by the one analysis conducted within the domain, as reported by Herman et al. (2015). A positive or negative improvement index does not necessarily mean the estimated effect is statistically significant. General literacy achievement outcomes reported in these studies include the Kentucky Performance Rating for Educational Progress (K-PREP) tests in reading and writing, the New York State English Language Arts Assessment, and the Smarter Balanced English Language Arts Assessment used in a West Coast school district. The general social studies achievement outcome is the K-PREP social studies assessment. The effects of *Literacy Design Collaborative* are not known for other outcomes within the Teacher Excellence topic area, including general mathematics achievement, general science achievement, general achievement, English language proficiency, staying in school, progression in school, completing school, student social interaction, observed individual behavior, student emotional status, student engagement in school, instructional practice, teacher attendance, teacher retention at the school, teacher retention in the school district, teacher retention in the state, or teacher retention in the profession.

## BOX 1. HOW THE WWC REVIEWS AND DESCRIBES EVIDENCE

The WWC evaluates evidence based on the quality and results of reviewed studies. The criteria the WWC uses for evaluating evidence are defined in the [Procedures and Standards Handbooks](#) and the [Review Protocols](#). The studies summarized in this report were reviewed under WWC Standards (version 4.0) and the Teacher Excellence topic area protocol (version 4.0).

To determine the effectiveness rating, the WWC considers what methods each study used, the direction of the effects, and the number of studies that tested the intervention. The higher the effectiveness rating, the more certain the WWC is about the reported results and about what will happen if the same intervention is implemented again. The following key explains the relationship between effectiveness ratings and the statements used in this report:

Effectiveness Rating	Rating interpretation	Description of the evidence
Positive (or negative) effects	The intervention is <i>likely</i> to change an outcome	Strong evidence of a positive (or negative) effect, with no overriding contrary evidence
Potentially positive (or negative) effects	The intervention <i>may</i> change an outcome	Evidence of a positive (or negative) effect with no overriding contrary evidence
No discernible effects	The intervention <i>may result in little to no change</i> in an outcome	No affirmative evidence of effects
Mixed effects	The intervention <i>has inconsistent effects</i> on an outcome	Evidence includes studies in at least two of these categories: studies with positive effects, studies with negative effects, or more studies with indeterminate effects than with positive or negative effects

## How is *Literacy Design Collaborative* Implemented?

The following section provides details of how districts and schools implemented the *Literacy Design Collaborative* program. This information can help educators identify the requirements for implementing the *Literacy Design Collaborative* and determine whether implementing this intervention would be feasible in their districts or schools. Information on *Literacy Design Collaborative* presented in this section comes from the studies that meet WWC standards and from correspondence with the developer.

- **Goal:** *Literacy Design Collaborative* aims to help teachers develop and use high-quality, standards-aligned literacy instructional materials that help build students' reading, research, and writing skills.
- **Target population:** *Literacy Design Collaborative* is designed to support teachers in kindergarten through grade 12 across subject areas.
- **Method of delivery:** Materials are provided online to support teachers in adapting or developing standards-aligned literacy tasks. In addition, schools provide collaborative planning time in a professional learning community, and trained *Literacy Design Collaborative* coaches provide virtual support and feedback. Participating teachers do not have to travel for the program though they may attend an in-district orientation for the program in the summer. School and district instructional leaders, including a teacher-leader, may attend virtual and in-person coaching institutes offered by *Literacy Design Collaborative*.
- **Frequency and duration of service:** Teachers develop and implement between one and four 2- to 3-week

**Comparison group:** In the three studies that contribute to this intervention report, students in the comparison group were taught by teachers who did not participate in *Literacy Design Collaborative*. Teachers may have participated in other training or professional development programs offered by their schools or school districts.

instructional modules over the course of a school year. Teachers participate in at least 45 minutes of collaborative planning time every week in a professional learning community. Every other week, the planning time includes virtual coaching from *Literacy Design Collaborative* coaches and time to engage in online course sessions. The amount of planning and coaching time varied across the studies that contribute to this report. In Herman et al. (2015), teachers were expected to participate in at least two professional development sessions—including classroom visits, coaching, meetings, or online courses—during the school year. Teachers in the other two studies (Wang et al., 2018, 2020) also received classroom visits and coaching, but formal professional development meetings were not listed among the activities occurring in those studies. Refer to Table 2 for additional details.

- **Intervention components:** The key components of *Literacy Design Collaborative*—including the instructional modules, student assessment, collaboration in professional learning communities, and coaching—are described in Table 2.

**Table 2. Components of the *Literacy Design Collaborative* program**

Key component	Description
<b>Instructional modules and tasks</b>	<p>Teachers work collaboratively and with support from coaches to develop new or implement existing instructional modules and tasks aimed at building students' reading, research, and writing skills. The modules are 2- to 3-week instructional plans for teaching literacy that are aligned with Common Core State Standards and address a particular theme or content area like English language arts, social studies, or science. At the end of each module, students complete a culminating writing task. Teachers implement one to four instructional modules over the course of a school year. Modules may also include mini-tasks, which are short literacy tasks that may occur during a single class period.</p> <p>To develop the modules and tasks, teachers use a framework created by the <i>Literacy Design Collaborative</i> that guides teachers in using fill-in-the-blank templates available in an online portal called CoreTools and illustrates the requirements for designing Common Core-aligned assignments using the templates. Teachers can access vetted literacy modules, tasks, and other resources through CoreTools. When choosing from the instructional modules and tasks on CoreTools, teachers can review assessments of the resources from other teachers who have used it in their classrooms, including descriptions of the quality, coherence, and alignment to Common Core standards.</p> <p>Nearly all teachers in Herman et al. (2015) taught two instructional modules related to <i>Literacy Design Collaborative</i> during the school year. The authors do not describe the implementation experience of the sample of teachers in the other two studies that contribute to this intervention report (Wang et al., 2018, 2020).</p>
<b>Rubrics to assess student work</b>	<p><i>Literacy Design Collaborative</i> provides five rubrics that teachers use to assess the disciplinary content of student work on the culminating writing task and whether the work meets literacy standards. The five rubrics—argumentative writing; informational writing; Next Generation Science Standards; National Council for the Social Studies College, Career, and Civic Life Framework for Social Studies State Standards; and Common Core State Standards for reading—were designed by the Stanford Center for Assessment Learning and Equity.</p>
<b>Professional learning community</b>	<p>Schools implementing the <i>Literacy Design Collaborative</i> program create professional learning communities by reserving at least 45 minutes every week for common planning time for teachers to collaborate on instructional modules and tasks. A teacher-leader at each participating school, with support from a <i>Literacy Design Collaborative</i> coach, provides local leadership for the professional learning community and coordinates learning community meetings.</p> <p>In Herman et al. (2015), three-fourths of teachers participated in common planning time, but only 26% did so every other week or more frequently. The authors do not describe the implementation experience of the sample of teachers in the other two studies that contribute to this intervention report (Wang et al., 2018, 2020).</p>
<b>Remote coaching</b>	<p>A <i>Literacy Design Collaborative</i> coach provides remote support to teachers implementing the program. During learning community meetings, coaches participate every other week by video conference to help teachers prepare instructional modules and tasks. Coaches may present course content related to <i>Literacy Design Collaborative</i> templates and tasks and direct teachers on how to access course content independently using CoreTools. In addition, coaches vet teachers' newly developed instructional modules and tasks to assure their quality before they are used in the classroom.</p>
<b>Leadership support</b>	<p>School and district instructional leaders may attend a coaching institute or coaching sessions, periodically participate in the learning community, and observe instruction and provide feedback to teachers.</p>

## What Does *Literacy Design Collaborative* Cost?

This preliminary list of costs is not designed to be exhaustive; rather, it provides educators an overview of the major resources needed to implement the *Literacy Design*

*Collaborative*. The program costs described in Table 3 are based on the information available as of July 2020.

**Table 3. Cost ingredients for *Literacy Design Collaborative***

Cost ingredients	Description	Source of funding
<b>Personnel</b>	Classroom teachers implement <i>Literacy Design Collaborative</i> with their students. Teachers are supported in doing so through participating in a professional learning community and receiving remote coaching support. Schools must provide common planning time for teachers to participate in the learning community and schools may need to increase the total amount of planning time for participating teachers. No information is available how schools provided teachers with common planning time.	Schools provide time for teachers to participate in common planning time for <i>Literacy Design Collaborative</i> activities. No information is available on how schools or school districts covered any costs associated with this additional planning time.
<b>Facilities</b>	Learning community meetings occur in a physical space within the school. Internet-connected computers are required to access intervention materials and remote coaching support.	School districts or schools provide the meeting facilities and Internet access.
<b>Equipment and materials</b>	Teachers obtain the materials needed to participate in <i>Literacy Design Collaborative</i> on the CoreTools online portal. Teachers can access these materials and the online professional learning community platform through a 1-year license which costs \$3,999 per school.	The developer may have grant funding available to support the cost of the 1-year license fee.

### For More Information:

About Literacy Design Collaborative  
 90 Broad Street, 2nd Floor  
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About the cost of the intervention  
 Web: [ldc.org](http://ldc.org)

## Research Summary

The WWC identified five studies that investigated the effectiveness of *Literacy Design Collaborative* (Figure 1):

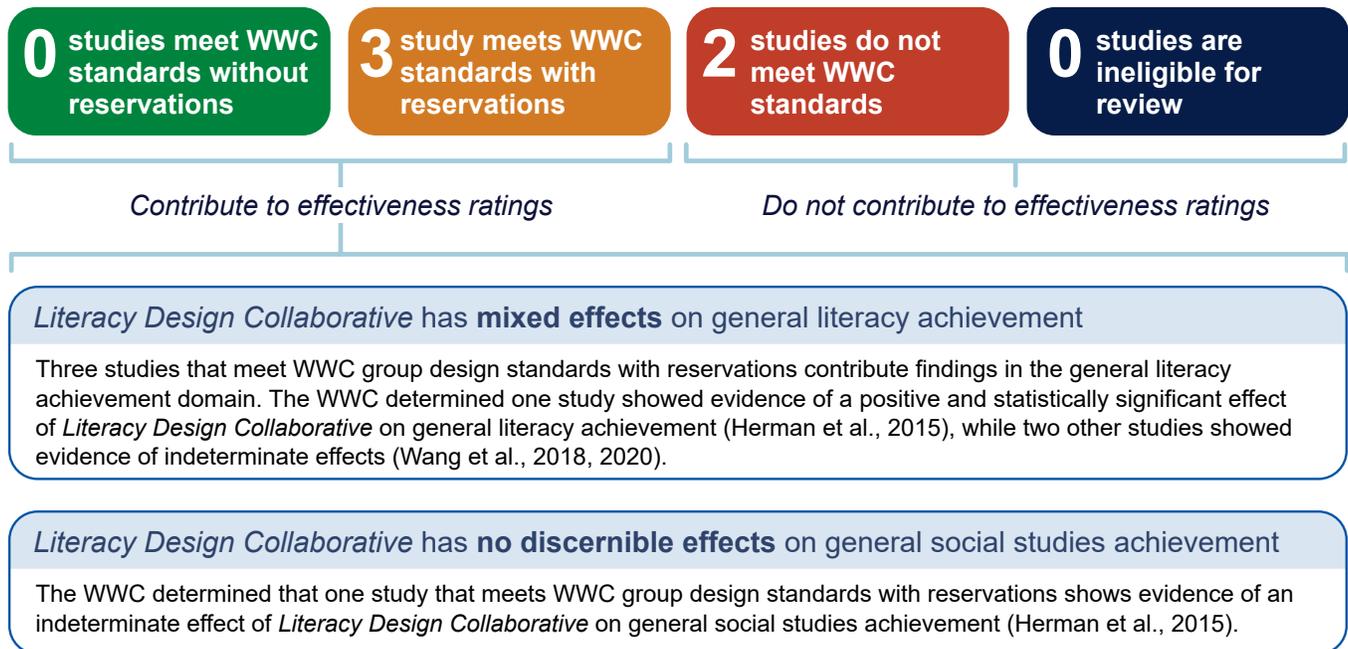
- Three studies meet WWC group design standards with reservations
- Two studies do not meet WWC group design standards

The WWC reviews findings on the intervention's effects on eligible outcome domains from studies that meet standards, either with or without reservations. Based on this review, the WWC generates an effectiveness rating, which summarizes how the intervention impacts, or changes, a particular outcome domain.

The WWC reports additional supplemental findings, such as those the study authors reported for a specific grade level, on the WWC website (<https://whatworks.ed.gov>). These supplemental findings and findings from studies that either do not meet WWC standards or are ineligible for review do not contribute to the effectiveness ratings.

The three studies of *Literacy Design Collaborative* that meet WWC group design standards reported findings on general literacy achievement and general social studies achievement. No other eligible findings were included among the studies that meet WWC group design standards.<sup>5</sup> Citations for the five studies reviewed for this report are listed in the References section, on page 13.

**Figure 1. Effectiveness ratings for Literacy Design Collaborative**



## Main Findings

Table 4 shows the findings from the three studies of *Literacy Design Collaborative* that meet WWC standards. The table includes WWC calculations of the mean difference, effect size, and performance of the intervention group relative to the comparison group. Based on findings from the three studies that meet WWC standards, the effectiveness rating for general literacy achievement is *mixed effects*, indicating

evidence of inconsistent effects on literacy achievement. The effectiveness rating for general social studies achievement is *no discernible effects*, indicating no affirmative evidence of effects on social studies achievement. These findings are based on at least 31,003 students for general literacy achievement and 19,962 students for general social studies achievement.

**Table 4. Findings by outcome domain from studies of *Literacy Design Collaborative* that meet WWC standards**

Measure (study)	Study sample	Sample size	Mean (standard deviation)		WWC calculations			p-value
			Intervention group	Comparison group	Mean difference	Effect size	Improvement index	
Kentucky Performance Rating for Educational Progress (K-PREP) Reading <sup>a</sup>	Grade 8	16,149	0.16 (0.93)	0.10 (0.92)	0.06	0.07	+3	<.01
K-PREP Writing <sup>a</sup>	Grade 8	13,972	nr	nr	0.01	0.01	+1	.63
<b>Outcome average for general literacy achievement (Herman et al., 2015)</b>						<b>0.04</b>	<b>+2</b>	<b>Statistically significant</b>
New York State English Language Arts Assessment <sup>b</sup>	Grades 4 and 5	468	-0.08 (0.98)	-0.02 (1.02)	-0.07	-0.07	-3	>.05
New York State English Language Arts Assessment <sup>b</sup>	Grades 6–8	6,428	0.01 (1.00)	0.01 (1.00)	0.00	0.00	0	.99
<b>Outcome average for general literacy achievement (Wang et al., 2018)</b>						<b>-0.03</b>	<b>-1</b>	<b>Not statistically significant</b>
Smarter Balanced English Language Arts Assessment (Wang et al., 2020) <sup>c</sup>	Grades 4–8	7,958	0.04 (1.00)	-0.03 (1.00)	0.06	0.06	+2	>.05
<b>Outcome average for general literacy achievement across all studies</b>						<b>0.02</b>	<b>+1</b>	
K-PREP Social Studies (Herman et al., 2015) <sup>a</sup>	Grade 8	19,962	0.09 (0.93)	0.10 (0.92)	0	0.00	0	.90
<b>Outcome average for general social studies achievement</b>						<b>0.00</b>	<b>0</b>	

Notes: For mean difference and effect size values reported in the table, a positive number favors the intervention group and a negative number favors the comparison group. The effect size is a standardized measure of the effect of an intervention on outcomes, representing the average change expected for all individuals who are given the intervention (measured in standard deviations of the outcome measure). An indicator of the effect of the intervention, the improvement index can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention. For example, an improvement index of +1 means that the expected percentile rank of the average comparison group student would increase by 1 point if the student received instruction from a teacher who used *Literacy Design Collaborative*. A positive or negative improvement index does not necessarily mean the estimated effect is statistically significant. Some statistics may not sum as expected due to rounding. nr = not reported.

<sup>a</sup> For Herman et al. (2015), the authors provided unadjusted means and standard deviations for K-PREP Reading and Social Studies in response to an author query; means were not available for the K-PREP Writing outcome. This study is characterized as having a statistically significant positive effect on general literacy achievement because the estimated effect is positive and statistically significant. This study is characterized as having an indeterminate effect on general social studies achievement because the mean effect reported is not statistically significant.

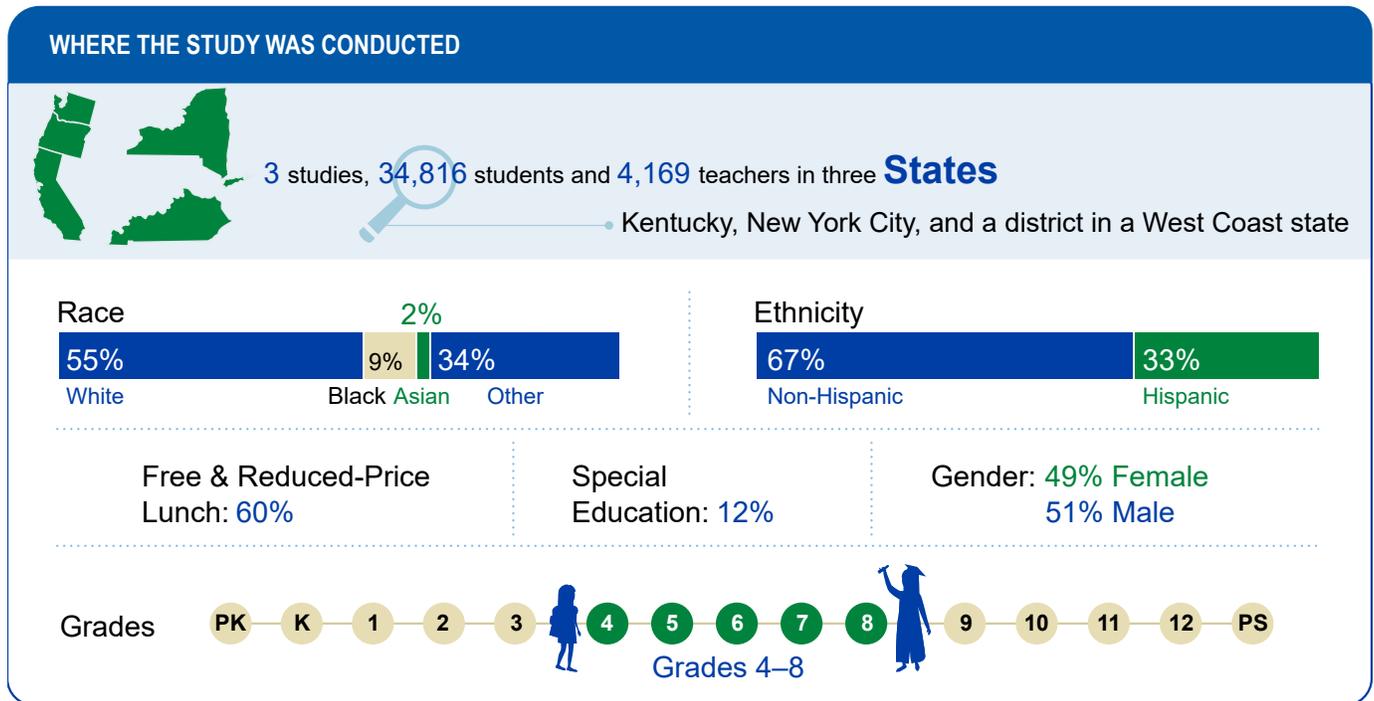
<sup>b</sup> Wang et al. (2018) required a correction for clustering and a difference-in-differences adjustment for the middle school analysis (grades 6–8). This was not required for the elementary school analysis because the student-level effect size was calculated from a statistical model with a clustering adjustment. The unadjusted means and standard deviations were provided in response to an author query. The *p*-value presented here for the middle school analysis was calculated by the WWC, because the *p*-value reported in the study was reported from an analysis that included an endogenous covariate (student time in core courses in the posttest year). The elementary school analysis did not include this endogenous covariate and so the *p*-value reported in the study is reported here. This study is characterized as having an indeterminate effect on general literacy achievement because the mean effect reported is not statistically significant.

<sup>c</sup> For Wang et al. (2020), the authors provided unadjusted means and standard deviations in response to an author query. This study is characterized as having an indeterminate effect on general literacy achievement because the mean effect reported is not statistically significant. For more information, please refer to the WWC Procedures Handbook, version 4.0, page 22.

## In What Context Was *Literacy Design Collaborative* Studied?

The following section provides information on the setting of the three studies of *Literacy Design Collaborative* that meet WWC standards, and a description of the participants in the research. This information can help educators

understand the context in which the studies of *Literacy Design Collaborative* were conducted and determine whether the program might be suitable for their setting.



## Details of Each Study that Meets WWC Standards

This section presents details for the studies of *Literacy Design Collaborative* that meet WWC standards. These details include the full study reference, findings description, findings summary, and description of study characteristics. A summary of domain findings for each study is presented below, followed by a description of the study characteristics. These study-level details include contextual information about the study setting, methods, sample, intervention group, comparison group, outcomes, and implementation details. For additional information, readers should refer to the original studies.

### Research details for Herman et al. (2015)

Herman, J. L., Epstein, S., Leon, S., Dai, Y., La Torre Matrundola, D., Reber, S., & Choi, K. (2015). *The*

*implementation and effects of the Literacy Design Collaborative (LDC): Early findings in eighth-grade history/social studies and science courses* (CRESST Report 848). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Retrieved from <http://cresst.org/wp-content/uploads/R848.pdf>

Findings from Herman et al. (2015) show evidence of a statistically significant positive effect of *Literacy Design Collaborative* on general literacy achievement (Table 5). The finding on general social studies achievement shows evidence of an indeterminate effect. The findings and research details summarized for this study come from two related citations, including the primary study listed above. See the References section on page 13 for a list of all related publications.

**Table 5. Summary of findings from Herman et al. (2015)**

Outcome domain	Sample size	Meets WWC Group Design Standards With Reservations		
		Average effect size	Improvement index	Statistically significant
General literacy achievement	634 teachers and 16,149 students	0.04	+2	Yes
General social studies achievement	790 teachers and 19,962 students	0.00	0	No

**Table 6. Description of study characteristics for Herman et al. (2015)**

<b>WWC evidence rating</b>	<b>Meets WWC Group Design Standards With Reservations.</b> This is a cluster quasi-experimental study that satisfies the baseline equivalence requirement for the individuals in the analytic intervention and comparison groups. For more information on how the WWC assigns study ratings, please see the <a href="#">WWC Procedures and Standards Handbooks (version 4.0)</a> and <a href="#">WWC Standards Briefs</a> , available on the WWC website.
<b>Setting</b>	The study took place in grade 8 history and science classrooms in Kentucky. Other details about the setting, such as the numbers of districts and schools, are not provided in the study.
<b>Methods</b>	This study compares grade 8 students of teachers who received the intervention to other grade 8 students enrolled in similar history and science courses in the state during the 2012–13 school year. The study authors formed the comparison group by matching intervention group students to students in similar school and classroom settings in the state based on their grade 7 reading and science scores, gender, race/ethnicity, special education status, eligibility for free or reduced-price lunch, school Title I status, English learner status, whether they attended schools with similar prior effectiveness, and whether they were taught by teachers with similar prior effectiveness. The matching was conducted separately for each outcome measure. The same student might contribute test scores in reading, writing, and social studies, although not all students were successfully matched for all three outcome measures.
<b>Study sample</b>	The study included 16,149 students for the reading outcome, 13,972 students for the writing outcome, and 19,962 students for the social studies outcome. The intervention condition included 36 teachers of history or science. The comparison conditions included students linked to 598 teachers for the reading outcome and 754 teachers for the social studies outcome. The number of comparison teachers used for the writing outcome was not reported. Approximately 2% of students were Hispanic or Latino, 92% were non-Hispanic White, 4% were non-Hispanic Black, and 1% were non-Hispanic Asian. Approximately half the students were male, 0.3% were English learners, 47% were eligible for free or reduced-price lunch, and 9% were eligible for special education.
<b>Intervention condition</b>	Prior to the study year, intervention teachers had implemented the <i>Literacy Design Collaborative</i> program in their classroom for 1 or 2 years. During the study year, teachers were expected to participate in regularly scheduled collaborative planning time in a professional learning community and implement at least two 2- to 4-week literacy modules during the school year. Teachers were also expected to participate in two or three of the following types of professional development activities: classroom observations, coaching sessions, online courses, or meetings. Teachers may have participated in some of these activities during the professional learning community planning time. Although 73% of the 36 intervention teachers participated in regularly scheduled collaborative planning time, only 26% of the teachers did so at least every other week. Sixty-nine percent of the intervention teachers participated in any professional development during the school year. Those who participated received one to six professional development sessions. All intervention teachers taught at least one <i>Literacy Design Collaborative</i> module during the study year, nearly all taught two, and some taught as many as four.
<b>Comparison condition</b>	Students in the comparison condition were enrolled in similar history and science courses taught by teachers who were not participating in <i>Literacy Design Collaborative</i> . Further information on this business-as-usual comparison condition was not provided in the study. Comparison teachers may have participated in other business-as-usual training and professional development offered by their schools or school districts.
<b>Outcomes and measurement</b>	The eligible outcomes for this study come from the 2013 end-of-year state assessment for grade 8, the Kentucky Performance Rating for Educational Progress. The study uses measures from the standardized assessments for reading and writing, which are in the general literacy domain, and for social studies, which is in the general social studies domain.
<b>Additional implementation details</b>	The authors report that the amount and content of professional development, the number of participating teachers within schools, and other implementation factors varied across districts and schools.

### Research details for Wang et al. (2018)

Wang, J., Herman, J. L., Epstein, S., Leon, S., Haubner, J., La Torre, D., & Bozeman, V. (2018). *Literacy Design Collaborative 2016-2017 evaluation report for the New York City Department of Education* (CRESST Report 856). Los Angeles, CA: University of California, National Center for Research on

Evaluation, Standards, and Student Testing (CRESST). Retrieved from <https://eric.ed.gov/?id=ED600125>

Findings from Wang et al. (2018) show evidence of an indeterminate effect of *Literacy Design Collaborative* on general literacy achievement (Table 7).

**Table 7. Summary of findings from Wang et al. (2018)**

Meets WWC Group Design Standards With Reservations				
		Study findings		
Outcome domain	Sample size	Average effect size	Improvement index	Statistically significant
General literacy achievement	1,641 teachers and 6,896 students	-0.03	-1	No

**Table 8. Description of study characteristics for Wang et al. (2018)**

<b>WWC evidence rating</b>	<b>Meets WWC Group Design Standards With Reservations.</b> This is a cluster quasi-experimental study that satisfies the baseline equivalence requirement for the individuals in the analytic intervention and comparison groups..
<b>Setting</b>	The study took place in 24 elementary schools and 105 middle schools in New York City with students in grades 4 through 8. The study included English language arts, social studies, and science classrooms in the middle schools.
<b>Methods</b>	The study compares outcomes for students who received instruction from teachers participating in <i>Literacy Design Collaborative</i> with those who did not. The authors used two steps to match intervention students to similar comparison students. In the first matching step, the 25 intervention schools (5 elementary schools and 20 middle schools) were matched to 104 similar comparison schools (19 elementary schools and 85 middle schools) based on school grade span, the percentage of students eligible for free or reduced-price lunch, percentage of Black students, mean prior year student achievement in English language arts, and average teachers' attendance rates and years of teaching experience. Students in the intervention schools were analyzed in the intervention condition if they received instruction from at least one <i>Literacy Design Collaborative</i> -trained teacher during the school year in which the outcome was measured. In the second matching step, each of the 3,448 intervention students (234 in elementary schools and 3,214 in middle schools) was matched to a similar student in a comparison school based on student grade, race/ethnicity, eligibility for free or reduced-price lunch, special education status, baseline score on English language arts and math tests, core classroom peers' average score on the baseline English language arts test, and core classroom teachers' average years of teaching experience. To be in the study sample in the intervention or comparison group, students were required to have both baseline and outcome test scores. Elementary students were required to be enrolled in the school for at least two-thirds of the school year. Middle school students were required to be enrolled in a core subject class for at least two-thirds of the school year.
<b>Study sample</b>	The 468 elementary school students—234 in each condition—were taught by 14 teachers in 5 schools in the intervention group and 100 teachers in 19 schools in the comparison group. The 6,428 middle school students—3,214 in each condition—were taught by 104 teachers in 20 schools in the intervention condition and 1,423 teachers in 85 schools in the comparison condition. Approximately half the students were male, 87% were eligible for free or reduced-price lunch, 13% were English learners, and 24% were eligible for special education. Fifty-five percent of the students were Hispanic or Latino, 31% were non-Hispanic Black, 8% were non-Hispanic Asian, and 6% were non-Hispanic White.
<b>Intervention condition</b>	Intervention group schools began implementing <i>Literacy Design Collaborative</i> in the 2016–17 school year. Participating teachers were expected to develop at least one instructional module aligned with English language arts standards to use in their classroom in the school year, provide instruction using at least two modules per year, and participate in at least 60 minutes of planning time in a professional learning community every 2 weeks. In addition, participating teachers were expected to receive feedback and support from a <i>Literacy Design Collaborative</i> coach remotely during learning community time, and through peer review comments on their instructional modules through the online CoreTools library. The authors do not describe the implementation experience of the sample of teachers in this study.
<b>Comparison condition</b>	Students in the comparison group were taught by teachers who did not participate in <i>Literacy Design Collaborative</i> . Comparison teachers may have participated in other business-as-usual training and professional development offered by their schools or school districts.
<b>Outcomes and measurement</b>	The authors measured students' scores on the 2017 New York State English Language Arts Assessment in grades 4 to 8, reporting findings separately for students in elementary and middle schools. This outcome measure is eligible for review in the general literacy achievement domain.
<b>Additional implementation details</b>	Coaches worked directly with one or more teacher-leaders trained in each school to support implementation. Coaches and teacher-leaders worked together to structure learning community time and coaching support for other teachers in their schools. <i>Literacy Design Collaborative</i> staff also trained school administrators and district instructional specialists to support implementation, observe classroom instruction, and attend learning community sessions.

### Research details for Wang et al. (2020)

Wang, J., Herman, J. L., Epstein, S., Leon, S., La Torre, D., & Bozeman, V. (2020). *Literacy Design Collaborative 2018-2019 evaluation report* (CRESST Report 867). Los Angeles, CA: University of California, National Center for Research

on Evaluation, Standards, and Student Testing (CRESST). Retrieved from <https://eric.ed.gov/?id=ED605029>

Findings from Wang et al. (2020) show evidence of an indeterminate effect of *Literacy Design Collaborative* in the general literacy achievement domain (Table 9).

**Table 9. Summary of findings from Wang et al. (2020)**

		Meets WWC Group Design Standards With Reservations		
		Study findings		
Outcome domain	Sample size	Average effect size	Improvement index	Statistically significant
General literacy achievement	1,104 teachers and 7,958 students	0.06	+2	No

**Table 10. Description of study characteristics for Wang et al. (2020)**

<b>WWC evidence rating</b>	<b>Meets WWC Group Design Standards With Reservations.</b> This is a cluster quasi-experimental study that satisfies the baseline equivalence requirement for the individuals in the analytic intervention and comparison groups.
<b>Setting</b>	This study took place in 137 elementary and middle schools in a large urban school district on the West Coast of the United States with students in grades 4 through 8. The study included English language arts, social studies, and science classrooms in the middle schools.
<b>Methods</b>	This study compares outcomes for students who received instruction from teachers participating in <i>Literacy Design Collaborative</i> with those who did not. The authors used two steps to match intervention students to similar comparison students. In the first matching step, the 26 intervention schools were matched to 111 similar comparison schools from the same school district based on school grade span, the percentage of students eligible for free or reduced-price lunch, percentage of Black students, mean prior year student achievement in English language arts and math, and average teachers' attendance rate and years of teaching experience. Students in the intervention schools were analyzed in the intervention condition if they received instruction from at least one <i>Literacy Design Collaborative</i> trained teacher during the school year in which the outcome was measured. In the second matching step, each intervention student was matched with a similar comparison student based on race/ethnicity, eligibility for free or reduced-price lunch, gender, baseline score on English language arts and math tests, English learner status, special education status, gifted student status, core classroom peers' average achievement on the baseline English language arts test, and core classroom teachers' average years of teaching experience. To be in the study sample in the intervention or comparison group, students were required to have demographic data, baseline and outcome test scores, and be enrolled for the entire school year.
<b>Study sample</b>	The 7,958 students in elementary and middle schools—3,979 in each condition—were taught by 89 teachers in 26 schools in the intervention group and 1,015 teachers in 111 schools in the comparison group. The sample breakdown between elementary and middle schools is not described. Approximately half the students were male, 69% were eligible for free or reduced-price lunch, 19% were English learners, and 8% were eligible for special education. Ninety-one percent of the students were Hispanic or Latino, 4% were non-Hispanic Black, 3% were non-Hispanic White, and 1% were non-Hispanic Asian.
<b>Intervention condition</b>	Intervention group schools began implementing <i>Literacy Design Collaborative</i> in the first cohort in the 2016–17 school year. A second cohort of schools participated starting in the 2017–18 school year. Participating teachers were expected to develop at least one instructional module aligned with English language arts standards to use in their classroom in the school year, provide instruction using at least two modules per year, and participate in at least 60 minutes of planning time in a professional learning community every 2 weeks. In addition, participating teachers were expected to receive feedback and support from a <i>Literacy Design Collaborative</i> coach remotely during learning community time, and through peer review comments on their instructional modules through the online CoreTools library. The authors do not describe the implementation experience of the sample of teachers in this study.
<b>Comparison condition</b>	Students in the comparison group were taught by teachers who did not participate in <i>Literacy Design Collaborative</i> . Comparison teachers may have participated in other business-as-usual training and professional development offered by their schools or school districts.
<b>Outcomes and measurement</b>	<p>The authors measure students' English language arts scores in a pooled analysis across grades 4 to 8 and both cohorts of schools. Outcomes for schools participating in the first cohort and their matched comparison group schools were measured using the Spring 2018 Smarter Balanced English Language Arts Assessment. For the schools participating in the second cohort and their matched comparison group schools, outcomes were measured using the Spring 2019 Assessment. This outcome measure is eligible for review in the general literacy achievement domain.</p> <p>The study also reports supplemental findings separately by elementary and middle schools. Summaries of these findings are available on the WWC website (<a href="https://whatworks.ed.gov">https://whatworks.ed.gov</a>). The supplemental findings do not factor into the intervention's rating of effectiveness.</p>
<b>Additional implementation details</b>	Coaches worked directly with one or more teacher-leaders trained in each school to support implementation. Coaches and teacher-leaders worked together to structure learning community time and coaching support for other teachers in their schools. <i>Literacy Design Collaborative</i> staff also trained school administrators and district instructional specialists to support implementation, observe classroom instruction, and attend learning community sessions.

## References

### Studies that meet WWC group design standards without reservations

None

### Studies that meet WWC group design standards with reservations

Herman, J. L., Epstein, S., Leon, S., Dai, Y., La Torre Matrundola, D., Reber, S., & Choi, K. (2015). *The implementation and effects of the Literacy Design Collaborative (LDC): Early findings in eighth-grade history/social studies and science courses* (CRESST Report 848). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Retrieved from <http://cresst.org/wp-content/uploads/R848.pdf> [Kentucky matched comparison QED]

#### **Additional source:**

Herman, J. L., Epstein, S., & Leon, S. (2016). Supporting Common Core instruction with Literacy Design Collaborative: A tale of two studies. *AERA Open*, 2(3), 1-15. Retrieved from <https://eric.ed.gov/?id=EJ1194403>

Wang, J., Herman, J. L., Epstein, S., Leon, S., Haubner, J., La Torre, D., & Bozeman, V. (2018). *Literacy Design Collaborative 2016-2017 evaluation report for the New York City Department of Education* (CRESST Report 856). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Retrieved from <https://eric.ed.gov/?id=ED600125>

Wang, J., Herman, J. L., Epstein, S., Leon, S., La Torre, D., & Bozeman, V. (2020). *Literacy Design Collaborative 2018-2019 evaluation report* (CRESST Report 867). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Retrieved from <https://eric.ed.gov/?id=ED605029>

### Studies that do not meet WWC group design standards

Herman, J. L., Epstein, S., Leon, S., Dai, Y., La Torre Matrundola, D., Reber, S., & Choi, K. (2015). *The implementation and effects of the Literacy Design Collaborative (LDC): Early findings in eighth-grade history/social studies and science courses* (CRESST Report 848). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Retrieved from <http://cresst.org/wp-content/uploads/R848.pdf> [Pennsylvania matched comparison QED] The study does not meet WWC standards because the measures of effectiveness cannot be attributed solely to the intervention.

Herman, J. L., Epstein, S., Leon, S., Dai, Y., La Torre Matrundola, D., Reber, S., & Choi, K. (2015). *The implementation and effects of the Literacy Design Collaborative (LDC): Early findings in sixth-grade Advanced Reading courses* (CRESST Report 846).

Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Retrieved from <https://eric.ed.gov/?id=ED571802> The study does not meet WWC standards because the measures of effectiveness cannot be attributed solely to the intervention.

#### **Additional source:**

Herman, J. L., Epstein, S., & Leon, S. (2016). Supporting Common Core instruction with Literacy Design Collaborative: A tale of two studies. *AERA Open*, 2(3), 1-15. Retrieved from <https://eric.ed.gov/?id=EJ1194403>

### Studies that are ineligible for review using the Teacher Excellence review protocol

None

## Endnotes

- <sup>1</sup> See, for example, [Goldhaber \(2020\)](#) and [Oppen \(2019\)](#).
- <sup>2</sup> [Hanushek \(2011\)](#) and [Chetty et al. \(2014\)](#), for example, describe differences across teachers in their impacts on academic achievement, and [Jackson \(2018\)](#) describes differences across teachers in their impacts on a variety of non-test score behaviors, including absences, suspensions, and course grades.
- <sup>3</sup> The descriptive information for this intervention comes from the studies that contribute to this intervention report, and from the intervention developer. The What Works Clearinghouse (WWC) requests that developers review the intervention description sections for accuracy from their perspective. The WWC provided the developer with the intervention description in July 2020 and the WWC incorporated feedback from the developer. Further verification of the accuracy of the descriptive information for this intervention is beyond the scope of this review.
- <sup>4</sup> The literature search reflects documents publicly available by October 2019. Reviews of the studies in this report used the standards from the WWC Procedures and Standards Handbook (version 4.0) and the Teacher Excellence topic area review protocol (version 4.0).
- <sup>5</sup> The effects of *Literacy Design Collaborative* are not known for other outcome domains within the Teacher Excellence topic area, including general science achievement, general mathematics achievement, general achievement, English language proficiency, staying in school, progression in school, completing school, student social interaction, observed individual behavior, student emotional status, student engagement in school, instructional practice, teacher attendance, teacher retention at the school, teacher retention in the school district, teacher retention in the state, or teacher retention in the profession.

## Recommended Citation

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