

Expanding the Expository Reading and Writing Curriculum:

An Evaluation of an Investing in Innovation Validation Grant

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Executive Summary

The Expository Reading and Writing Curriculum (ERWC) is a college-preparatory English language arts (ELA) curriculum developed by the California State University (CSU) to improve students' readiness for college-level English and future careers through the in-depth study of expository, analytical, and argumentative reading and writing. It seeks to build the strategies and abilities of students in rhetorical analysis of compelling issues and interesting texts. The curriculum is inquiry-based and focuses on issues and questions that are intended to be of interest to students and that lead them to investigate those issues within their own lives, aiming to foster authentic dialogue in the classroom and beyond. The curriculum also aims to teach students the ways that different aspects of rhetorical situations—especially audience, purpose, occasion, and genre—can influence how they communicate.

A previous evaluation, conducted by WestEd under an Investing in Innovation (i3) Development grant, focused on an earlier version of the ERWC and found that the grade 12 course had a positive and statistically significant impact on student achievement (Fong et al., 2015). Based on these findings, the Fresno County Superintendent of Schools (FCSS) received a five-year i3 Validation grant that began in January 2017 to further develop and refine the ERWC and to develop a full-year grade 11 ERWC course, which resulted in a new version of the curriculum: ERWC 3.0. To support the implementation of the ERWC 3.0, the FCSS, in partnership with the CSU and the Washington state Office of Superintendent of Public Instruction (OSPI), developed professional learning that included annual Summer Institutes, coaching, and communities of practice.

Through the i3 Validation grant, WestEd researchers assessed the fidelity of the curriculum implementation in 49 high schools in three school years: 2018/19 (Pilot Year 1), 2019/20 (Pilot Year 2), and 2020/21 (Evaluation Year). WestEd conducted a rigorous independent evaluation of the ERWC 3.0's impact on student achievement and a cost analysis of the curriculum in the Evaluation Year.

During each pilot year of the i3 Validation grant, the ERWC 3.0 was offered to approximately 15,000 students in grades 11 and 12 in the 49 study schools across California and Washington. A total of 189 teachers piloted the ERWC 3.0 in Pilot Year 1, and 198 teachers piloted the ERWC 3.0 in Pilot Year 2. During the Evaluation Year, the ERWC 3.0 was offered to approximately

In years past, the "ERWC" acronym stood for the "Expository Reading and Writing Course" in reference to the grade 12 course. However, with the development of a full-year grade 11 course beginning in the 2018/19 school year, the developers of the curriculum now refer to the ERWC as the "Expository Reading and Writing Curriculum."



15,000 students in grades 11 and 12 in 46 study schools across California and Washington, and a total of 141 ERWC teachers participated.

Implementation Evaluation

To gauge levels of implementation in the three years of the study, the research team assessed the following:

- 1. Fidelity to the instructional model. What was the level of teacher participation in required professional learning experiences? How much of the curriculum did teachers teach?
- 2. Participants' perceptions of successes and challenges. What key successes and challenges did teachers, students, and coaches report from their experiences in Pilot Year 1 and Pilot Year 2?

The success of the implementation of the ERWC depends on how fully and effectively it is taught—i.e., fidelity to the instructional model. To assess the fidelity of implementation of the curriculum, WestEd examined whether teachers participated in the required ERWC professional learning and how much of the curriculum was taught during each school year of the study.

Overall, a high percentage of teachers participated in the professional learning with fidelity in each year, but few teachers taught the full curriculum with fidelity, and this was due to many factors, including time constraints and shifts in instruction due to the COVID-19 pandemic. Throughout the three years of the study, the proportion of teachers who completed the required professional learning activities ranged from 82 to 99 percent, while the proportion of teachers who taught the curriculum with fidelity ranged from 0 to 3 percent. Teachers noted that the reason for not being able to teach all of the required modules with fidelity was that there were not enough instructional minutes during the school year to get through all of the modules.

In addition to examining fidelity to the instructional model, WestEd's evaluation team collected and analyzed teacher, student, and coach perceptions about the ERWC 3.0 based on their pilot year experiences. The evaluation team asked for feedback on the experience of implementing the ERWC and sought teachers' and students' perspectives about whether the curriculum and accompanying changes in instructional approaches affected student engagement and/or their reading and writing skills. Each strand of data collection informed the development of research instruments in subsequent strands of data collection. Exploratory in nature, the findings provide context for findings from the impact evaluation portion of the study. Moreover, they can help the ERWC developers understand factors that helped or hindered implementation and can help the developers make informed adjustments to bolster the ERWC's success.

Findings suggest that teachers viewed the ERWC 3.0 as an improved version of the curriculum that promoted a high level of student engagement and supported students' academic and personal growth. Teachers became more comfortable with implementing the curriculum with



each successive year. Consistent with findings from WestEd's previous evaluation of the ERWC 2.0 (Fong et al., 2015), teachers found teaching the required number of modules to be challenging. Moreover, teachers least often taught the aspects of the curriculum that were associated with writing and metacognition.

Impact Evaluation

A student-level randomized controlled trial (RCT) was used to evaluate the impact of the ERWC 3.0 in grade 11. Grade 11 students were randomized by WestEd researchers to either the ERWC or a comparison grade 11 English curriculum in each of the 17 participating schools, and impact was measured using student achievement on a standardized test. Because of the COVID-19 pandemic's disruptions, not all students took the same standardized assessment and so two study samples were evaluated—one consisted of students who took the Grade 11 Non-Performance Task (Non-PT) ELA/Literacy Interim Comprehensive Assessment (ICA) and the other sample consisted of students who took the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment.

To evaluate the impact of the ERWC 3.0 in grade 12, WestEd researchers used a quasi-experimental design (QED), which was necessary because students in grade 12 could not be randomly assigned to treatment or comparison conditions given that the English course that a student takes in grade 12 could impact the English course that the student is allowed to take if the student matriculates to a CSU. Study students in grade 12 took either the Non-PT ICA or the Performance Task (PT) ICA.

The results of the grade 11 impact evaluation found that assignment to the ERWC has a positive and statistically significant impact on student achievement as measured by the Non-PT ICA; however, no statistically significant impact was detected with the Summative Assessment study sample. In the grade 12 impact evaluation there was no statistically significant difference in achievement between students who had enrolled in the ERWC and students who had enrolled in the comparison English course; this was true for both study samples—those who took the Non-PT ICA and those who took the PT ICA.

Cost Analysis

WestEd conducted a cost analysis to estimate the total investment in the development and implementation of the ERWC. The purposes of this cost analysis are to capture the resources required for this specific version of the ERWC program, to understand the use of resources in the current design, and to inform future resource planning.

The ingredients method was the primary method of the cost analysis: Researchers first identified the "ingredients" of the ERWC 3.0—all the necessary resources, from books and materials to staff time—and every ingredient was assigned a quantity and market price. An



estimated total cost was calculated on that basis. The cost analysts used a myriad of sources to obtain the necessary data, including administrative and financial datasets, survey data, and primary purchase documents.

The cost analysis suggests that the ERWC is a modest investment, and upfront investments in curriculum development and teacher trainings will become insignificant over time.

Discussion

Overall, teachers viewed the ERWC 3.0 as a highly engaging curriculum that supported students' academic and personal growth. As teachers gained experience with implementing the ERWC 3.0, they became more comfortable with modifying the curriculum to meet the needs of their students.

As the COVID-19 pandemic changed the context of learning throughout the world, it also changed the context for the ERWC study. Facilitating learning online, which occurred during the evaluation year, disrupted both the implementation of the ERWC and WestEd's plan for the impact evaluation. From the perspectives of participating teachers, results from the study in the Evaluation Year do not reflect teachers' and students' abilities. Conducting an additional study during a year when learning takes place fully in person may be warranted.



Key Terms and Organizations

Assignment Template: The central organizing structure for the ERWC modules.

California State University (CSU): The state university system of 23 campuses in California and part of the partnership that received the i3 grant supporting ERWC expansion and evaluation.

Center for the Advancement of Reading and Writing (CAR/W): A research and training organization within the CSU system with a focus on preparing ELA teachers and literacy specialists.

Community of Practice: A group of teachers who meet to discuss successes and challenges of teaching the curriculum, review student work, and collaboratively solve problems of practice.

English 11 Comparison Course: The comparison, or "business-as-usual," English course that was studied in grade 11 in the 2019/20 and 2020/21 school years.

English 12 Comparison Course: The comparison, or "business-as-usual," English course that was studied in grade 12 in the 2020/21 school year.

ERWC Arc: The "arc" that ERWC instruction follows within each module, beginning with reading professional, or mentor, texts and leading to students writing their own texts.

ERWC Steering Committee: A group of individuals appointed to lead the development of the expanded ERWC curriculum, the ERWC 3.0. This group was made up of literacy and pedagogy professors and district leaders.

Expository Reading and Writing Curriculum (ERWC): The treatment curriculum that was piloted and evaluated in grades 11 and 12; sometimes refers specifically to the third edition of the curriculum, also known as the ERWC 3.0, which encompasses modules for grades 11 and 12 and is the focus of the evaluation study that is the topic of this report.

Focused Interim Assessment Block (FIAB): Short interim assessments, part of the Smarter Balanced curriculum and assessment suite, with each assessing one to three target skills.

Fresno County Superintendent of Schools (FCSS): The county office of education responsible for Fresno County, supporting 32 school districts; the prime recipient, in partnership with the



CSU and WestEd, of the i3 Validation grant from the U.S. Department of Education to update and refine the ERWC and increase the scope and effectiveness of ERWC professional learning.

Module: Unit of study in the ERWC.

Smarter Balanced English Language Arts (ELA)/Literacy Interim Comprehensive Assessment:

An assessment, built on the same blueprints as the summative assessments, that is used to evaluate ELA/literacy skills.

Smarter Balanced English Language Arts (ELA)/Literacy Summative Assessment:

A comprehensive, end-of-year assessment that is aligned to the Common Core State Standards for ELA.

Summer Institute: Professional learning for ERWC teachers that took place in the summer before each year of the study.



1. Introduction

The Expository Reading and Writing Curriculum (ERWC) is a college-preparatory English language arts (ELA) curriculum developed by the California State University (CSU) to improve students' readiness for college-level English and future careers through the in-depth study of expository, analytical, and argumentative reading and writing. It seeks to build students' strategies and abilities in rhetorical analysis of compelling issues and interesting texts. The curriculum is inquiry-based, focuses on issues and questions that are of interest to students, and aims to lead them to investigate those issues within their own lives and to foster authentic dialogue in the classroom and beyond. The curriculum also aims to teach students how different aspects of rhetorical situations—especially audience, purpose, occasion, and genre—can influence communication.

A previous evaluation, conducted by WestEd under an Investing in Innovation (i3) Development grant, focused on an earlier version of the ERWC and found that the grade 12 course had a positive and statistically significant impact on student achievement (Fong et al., 2015). To measure student achievement, that evaluation used the English Placement Test (EPT), a test formerly used by the CSU to determine whether incoming freshmen to the CSU system could immediately enroll in a credit-bearing English course. The previous WestEd evaluation also found that grade 12 ERWC teachers felt that students could be better served if they were taught ERWC skills before grade 12. For instance, the previous evaluation reported one teacher saying:

I learned that, as a school, we need to work on [having students write] essays of all modes from the get-go. We need to work more intently ... to instruct them on how to select meaningful passages as evidence and then how to explain the significance of these passages as support of their theses. But, this process needs to begin earlier than 12th grade. (Fong et al., 2015, p. 46)

Based on findings such as these about the impact and implementation of the course, the Fresno County Superintendent of Schools (FCSS) applied for and received a five-year i3 Validation grant that began in January 2017 to further develop and refine the ERWC as well as to develop a full-year grade 11 ERWC course. The FCSS partnered with several organizations to carry out grant activities: The CSU led the development of the curriculum and the Office of Superintendent of Public Instruction (OSPI) in the state of Washington scaled the curriculum in that state. WestEd

In years past, the "ERWC" acronym stood for the "Expository Reading and Writing Course" in reference to the grade 12 course. However, with the development of a full-year grade 11 course beginning in the 2018/19 school year, the developers of the curriculum now refer to the ERWC as the "Expository Reading and Writing Curriculum."



was contracted to be the independent evaluator on the grant, tasked with evaluating the impact of the ERWC, understanding and documenting how the ERWC is being implemented within schools, and providing formative feedback about the implementation of the curriculum to the CSU, the OSPI, and the FCSS throughout the grant.

The version of the ERWC that was developed and evaluated through this grant is the third edition of the curriculum. It encompasses modules for grades 11 and 12 and is sometimes referred to as the ERWC 3.0. This report describes the process and findings of WestEd's independent evaluation to analyze whether the ERWC 3.0—including the newly developed grade 11 ERWC modules and the revised grade 12 ERWC modules—had a positive impact on student achievement and to document how the ERWC 3.0 was implemented in study schools. WestEd conducted an experimental and quasi-experimental study to evaluate the ERWC's impact on student achievement and conducted qualitative analyses to document implementation fidelity and perceptions of the successes and challenges of implementing the curriculum.

Under the i3 Validation grant, piloting and implementation of the ERWC 3.0 took place over the course of the following three years:

- 2018/19 school year (Pilot Year 1)
- 2019/20 school year (Pilot Year 2)
- 2020/21 school year (Evaluation Year)

The 2018/19 school year was initially intended to be the only pilot year for the ERWC 3.0, a year when teachers could become familiar with the curriculum. The 2019/20 school year was expected to be the evaluation year for grade 11. However, as a result of the COVID-19 pandemic and the resulting school closures and the cancellation of standardized testing in the 2019/20 school year, impact data could not be collected for the 2019/20 school year. Consequently, the 2019/20 school year became a second pilot year for the study. The 2020/21 school year was initially intended to be the impact evaluation year only for grade 12. However, because the evaluation could not be completed for grade 11 in 2019/20, the 2020/21 school year became an impact evaluation year for both grades 11 and 12.

The Initial Development of the Expository Reading and Writing Curriculum

The ERWC was originally developed during the 2003/04 school year in response to English remediation rates in the CSU system that commonly exceeded 45 percent.³ The ERWC Steering Committee—a group of CSU faculty and California high school educators that oversee the development and implementation of the ERWC—focused on findings that high school seniors

³ The CSU reports on freshman remediation and proficiency rates, by campus and systemwide, going as far back as 1997: http://asd.calstate.edu/performance/proficiency.shtml.



needed to improve in the areas of analytical and expository reading and writing. For instance, in 2002, a study was conducted that surveyed faculty across the disciplines at the University of California (UC), the CSU, and the California Community Colleges to understand the expectations that faculty had for the critical reading, writing, and thinking abilities of entering students (Intersegmental Committee of the Academic Senates, 2002). This study found that 83 percent of surveyed college faculty said that students' lack of analytical reading skills contributed to their lack of course success. The report also found that faculty respondents reported that only one-third of entering college students were sufficiently prepared for the two most frequently assigned writing tasks in college: analyzing information or arguments and synthesizing information from several sources. With regards to connecting reading and writing, the report stated, "Students, like the writers whose works they read, should articulate a clear thesis and should identify, evaluate, and use evidence to support or challenge that thesis while being attentive to diction, syntax, and organization" (Intersegmental Committee of the Academic Senates, 2002, p. 4).

The ERWC's original development was part of the CSU's Early Assessment Program (EAP) to help students avoid remediation upon entering college.⁴ The ERWC was first piloted in the 2004/05 school year by approximately 660 California high school English teachers (California State University, 2005). The piloting stage continued through 2007, after which the course was revised in response to constructive feedback from a variety of stakeholders (including teachers, school and district administrators, and students), and then published in 2008 for use by schools throughout the state.

In 2011, the FCSS, in partnership with the CSU and WestEd, received an i3 Development grant from the U.S. Department of Education to update and refine the 2008 curriculum materials and increase the scope and effectiveness of the ERWC professional learning. The i3 Development grant also enabled the expansion of the ERWC across more schools throughout California and into additional grade levels, with some ERWC modules being developed for grades as low as grade 7. The second edition of the curriculum, referred as the ERWC 2.0, was released for the 2013/14 school year.

The 2011 i3 Development grant also funded WestEd to conduct a rigorous independent evaluation of the ERWC's impact on student achievement and to assess the fidelity of its implementation at study sites. That evaluation found a positive and statistically significant impact of enrollment in the ERWC on student achievement within the study's 24 California high schools (Fong et al., 2015). More specifically, students who enrolled in the ERWC scored higher on the CSU's EPT compared to similar students who enrolled in comparison English courses such as English 4.

⁴ The EAP is an academic preparation program jointly developed by the CSU, the California Department of Education, and the California State Board of Education to bridge the gap between K–12 education in English and math and the expectations of postsecondary education at the CSU.



The Current Expository Reading and Writing Curriculum: College Readiness Via Rhetorical Literacies

In 2016, the FCSS applied for and received an i3 Validation grant to further expand and validate the ERWC, creating the ERWC 3.0, with the intention of bridging gaps in knowledge and adapting and applying what was learned from the first two editions of the ERWC. The ERWC Steering Committee also sought to bring the ERWC to scale by expanding the curriculum to grade 11 and expanding the professional network into the state of Washington (see Table 1.1).

Table 1.1 Comparing the ERWC 2.0 to the ERWC 3.0

Curriculum Component	ERWC 2.0	ERWC 3.0
Grade 11 full-length modules	N/A	23 updated/newly developed full-length modules
Grade 12 full-length modules	12 full-length modules	23 updated/newly developed full-length modules
Concept mini-modules	N/A	Addition of short modules to introduce/reinforce rhetorical concepts in full-length modules
Portfolio modules	N/A	Addition of portfolio modules that emphasize setting/reflecting on learning goals
Pedagogical emphasis	Focus on critical thinking and classroom discussions	Addition of integrated and designated English Language Development, Universal Design for Learning, and a focus on transfer of learning

Note. The module "What's Next? Thinking About Life After High School" was part of the ERWC 2.0. In ERWC 3.0, the module can be taught in either grade 11 or grade 12. Portfolio modules were originally considered mini-modules, but they were placed into their own category when the ERWC 3.0 was revised. "N/A" means not applicable.

High school teachers and college faculty with diverse backgrounds, experiences, and identities helped develop the ERWC 3.0. According to the ERWC developers, authors approached writing modules from various angles and perspectives, and built on one another's expertise.

In addition to including a full grade 11 course, the ERWC 3.0 builds on other findings from the ERWC 2.0 evaluation (Fong et al., 2015) by including an updated grade 12 curriculum that incorporates newer, more up-to-date readings; a refined Assignment Template, which is the



central organizing structure for the ERWC modules;⁵ and additional modules to give teachers more options for what they may teach over the course of the year.

New emphases in the ERWC 3.0 include the transfer of learning,⁶ greater variety of literary and informational texts, greater variety of writing and speaking tasks, the inclusion of "designated" and "integrated" English Language Development (ELD),⁷ and features from Universal Design for Learning (UDL), including student goal-setting and multiple ways for students to demonstrate their learning.

Full-length modules cover the full arc of the Assignment Template (the organizing structure of the modules, delineated in Figure 5.1 and described in more detail later). Mini-modules are shorter in length and duration and cover specific rhetorical concepts and skills that prepare students to work through the full-length modules. According to the course description approved by the University of California, mini-modules "focus on ideas considered threshold concepts for the course that will be used in most modules as well as in other disciplines. The most critical of these are the rhetorical situation (audience, purpose, occasion); Aristotelian rhetorical appeals (ethos, pathos, and logos); metacognition; and transfer of learning" (CSU, 2018). Portfolio modules, which are taught at the beginning and the end of the school year, allow students to set, track progress towards, and reflect on their learning goals.

Each full-length module is classified into one of the following four categories, with descriptions provided for each type of full-length module as documented by the course description that is used to gain approval from the University of California (CSU, 2018; CSU, 2019):⁸

• **Book module:** "Students read and analyze the selected book considering its literary and rhetorical features and questions at issue. Students typically engage in activities in each section of the book—often with a major writing assignment at the conclusion of each."

• Drama module:

- **Grade 11:** "Students read and analyze one full-length play," which results in students writing "an essay evaluating a character from the play or write a one-act play featuring a contemporary character of their invention [or] a third act for the play exploring a present-day iteration of one of the play's characters."
- **Grade 12:** "Students read and interact with the dramas in dynamic and interesting ways and engage with Shakespeare's rich and complex language. The modules combine close readings, written reflections, performance activities, and in-class discussions as a means of prompting students to think deeply about the ways in

⁵ For more information about the Assignment Template, see Figure 5.1.

⁶ Transfer of learning refers to the ability to apply skills learned in one setting in another setting.

Designated ELD is defined as "instruction provided during a time during the regular school day for focused instruction on the state-adopted ELD standards to assist English learners to develop critical English language skills necessary for academic content learning in English" (California Code of Regulations, Title 5, Section 11300[a]). Integrated ELD is defined as "instruction in which the state-adopted ELD standards are used in tandem with the state-adopted academic content standards. Integrated ELD includes specifically designed academic instruction in English" (California Code of Regulations, Title 5, Section 11300[c]).

⁸ The research category has since been eliminated, so a description of it is not included.



which words can be used to create meaning. Students also analyze Shakespeare's use of character to develop his themes."

- Foundational document module: "Students relate historical American documents to issues of the day and synthesize their understandings to create an argument for the role the Declaration of Independence should have in our society today; what the civil rights movement should look like today; how best to integrate people of different backgrounds or abilities; or identify an action to solve a problem in the school, community, or world."
- Issue module: "All modules include extensive collaboration and discussion,
 examination of vocabulary, text-based critical thinking questions, and analysis of
 rhetorical effects. Many of the issue modules engage students in using technology to
 identify additional sources of information and most offer choices of issues and
 assignments that students explore beyond the initial readings and assigned activities."

The ERWC 3.0 also includes concept and portfolio mini-modules as well as modules for full-length books, dramas, foundational documents, and issues. Concept mini-modules are short modules that can be taught within a week and introduce or reinforce foundational concepts and strategies that are applicable to full-length modules. For example, a concept mini-module may cover a concept such as Kairos theory or Stasis theory. Portfolio mini-modules guide students through the process of setting and reflecting on learning goals throughout the course. In full-length book modules, the primary text is a book, and in full-length drama modules, the primary text is a play. Full-length issue modules present multiple perspectives on controversial topics through a variety of both fiction and nonfiction texts.

There were a few changes made to the module categories between Pilot Year 1 and Pilot Year 2 of the study—see Appendix A for an overview of these changes and for a full list of modules by category as published in the ERWC 3.0.

In the i3 Validation grant proposal, the ERWC Steering Committee planned to develop 16 modules in each of grades 11 and 12 (32 modules total). However, a total of 71 modules were drafted for the ERWC 3.0 and 65 modules were published in the final version. ¹⁰

During Pilot Year 1 of this study, the ERWC 3.0 also included full-length research modules. Those modules were collapsed into other categories for Pilot Year 2.

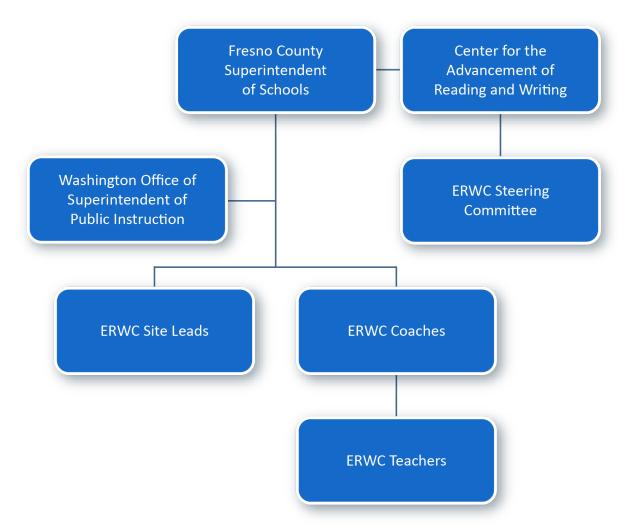
¹⁰ Six modules that were drafted for the ERWC 3.0 were not published in the final version, and an additional module was drafted and published in the ERWC 3.0 without being piloted.



Partners Involved With Implementing the ERWC 3.0

Numerous partners were involved with implementing the ERWC 3.0 (see Figure 1.1).

Figure 1.1 Organizational Structure for the Investing in Innovation Validation Grant Partners



The partners had the following roles:

- Fresno County Superintendent of Schools: Oversee the budget, co-design the professional learning, manage the distribution of course materials, and serve as a liaison between OSPI, ERWC site leads, and ERWC coaches.
- Center for the Advancement of Reading and Writing (CAR/W): Oversee the
 development and production of the curriculum and co-design the professional learning.
- ERWC Steering Committee: Develop curriculum and advise on professional learning.



- Washington Office of Superintendent of Public Instruction: Serve as a liaison between Washington ERWC teachers and the FCSS and the CSU.
- **ERWC site leads:** Serve as a liaison between the school and the FCSS, the CSU, and the OSPI, and facilitate community of practice (CoP) meetings.
- **ERWC coaches:** Support teachers through coaching cycles.
- **ERWC teachers:** Attend Summer Institutes, participate in coaching cycles, participate in CoP meetings, and teach the ERWC 3.0.

Timeline of the i3 Validation Grant

The first year and a half of the i3 Validation grant was devoted to the development of the third edition of the ERWC (ERWC 3.0). The ERWC Steering Committee worked with module authors to write and revise modules for grade 11 and grade 12 courses. Grades 11 and 12 teachers piloted the newly developed modules in the 2018/19 school year.

Based on feedback from the piloting teachers, the modules were revised for the 2019/20 school year, during which teachers were asked to teach five full-length modules, three mini-modules, and two portfolio modules. During the 2019/20 school year, the curriculum was piloted for a second year in grade 11 and grade 12. During the 2020/21 school year, WestEd began the impact evaluation of the curriculum in select schools in grade 11 and all participating schools in grade 12. Figure 1.2 provides the high-level timeline for the grant.

Figure 1.2 High-Level Timeline of the i3 Validation Grant

2017/18 2018/19 2019/20 2020/21 2021/22 ERWC Steering • Teachers pilot the • Teachers pilot • Grade 11 ERWC · WestEd works with the Committee develops grade 11 ERWC and grade 11 and evaluated in 17 schools CSU to identify which modules for grade 11 (optionally) pilot grade 12 ERWC. and others may students in the study and develops/refines grade 12 ERWC. enrolled at the CSU. choose to adopt. • ERWC Steering grade 12 modules. ERWC Steering Committee refines • Grade 12 ERWC impact • ERWC Steering Committee revises professional learning on student achievement Committee also grade 11 and grade 12 for teachers and after two years of enrollment evaluated develops professional modules based on coaches. learning for teachers teachers' feedback by WestEd. and coaches. from the pilot. • ERWC Steering Committee refines professional learning for teachers and coaches.



How the COVID-19 Pandemic Impacted the Evaluation

As the COVID-19 pandemic changed the context of learning throughout the world, it also changed the context for the ERWC study. Beginning in March 2020, all schools in the study stopped offering in-person learning in an effort to stop the spread of COVID-19. From March 2020 through the end of the 2019/20 school year, learning took place fully online through video conferencing technology and online learning platforms.

Facilitating learning online presented many challenges—especially challenges related to equity. First, many students did not have access to devices or the internet, making it impossible for them to complete schoolwork. In response, some districts put policies in place whereby teachers would not assign work until all students had access to devices and the internet. Other districts restricted the amount of time that teachers could give instruction. Another equity-related challenge was that students were receiving instruction of varied quality. In response, some districts required teachers to teach the same curriculum or add curriculum that addressed students' social and emotional learning needs. These policies prevented teachers from fully teaching the curriculum relevant to this study—the ERWC or the English curriculum taught in the comparison group. And when teachers were allowed to teach their curriculum, many districts prohibited teachers from grading students' work. Teachers reported that there were low levels of student engagement while learning took place online, and they attributed the low engagement mostly to the lack of accountability.

The school closures also impacted standardized testing, as the U.S. Department of Education waived federal testing requirements at the end of the 2019/20 school year. The assessment that had been planned to be the outcome measure for this study, the Smarter Balanced ELA/Literacy Summative Assessment, would no longer be administered for the 2019/20 school year. Therefore, WestEd was unable to collect outcome data for the randomized controlled trial designed to take place in grade 11 in 2019/20. Consequently, WestEd considered the 2019/20 school year to be a second pilot year. WestEd then was able to recruit 17 of the participating schools to participate in an additional randomized controlled trial in grade 11 in the 2020/21 school year.

Although most districts were able to address the previously noted equity issues as they prepared for the 2020/21 school year, 2020/21 presented a new set of challenges. During the summer of 2020 and up until the beginning of the 2020/21 school year, schools were unsure whether it was safe for any learning to take place in person. This uncertainty made scheduling students' classes difficult—especially students who were randomly assigned to the ERWC or the comparison group in grade 11. Ultimately, at the beginning of the 2020/21 school year, 4 (9%) of the 46 participating schools implemented a hybrid model in which approximately half of instruction took place in person and the other half took place online. The remaining 42 (91%) of the participating schools began the 2020/21 school year teaching completely online.



Teachers became more familiar and comfortable with teaching online in the 2020/21 school year. Despite teachers' considerable efforts to engage students in online learning, low attendance was a widespread issue. Additionally, much of the ERWC could not be implemented as it was intended. For example, the ERWC requires lots of student-to-student interaction. However, students were reluctant to interact with one another through video conferencing. Therefore, teachers were unable to implement the curriculum as it was designed.

While some districts required instruction to remain online for the entire school year, others gradually allowed students to return to campuses as the 2020/21 school year progressed. Teachers whose schools implemented a hybrid model faced their own set of challenges—one being that they had to plan instruction for both in-person and online learning.

In 2020/21, the evaluation plan for grade 11 was for students to take the Smarter Balanced ELA/Literacy Summative Assessment at the end of the school year. This summative assessment is the standardized assessment that is typically administered in California. However, the California Department of Education gave districts the option to forgo administering the assessment; the Washington Office of the Superintendent of Public Instruction canceled standardized testing altogether. Districts in California that opted to move forward with administering the assessment were given access to a shortened version of the assessment and had the option to administer it online or in person.

While districts likely welcomed this flexibility, it complicated WestEd's plan for collecting outcome data for grade 11 in the 2020/21 evaluation year. Shortly after WestEd researchers learned about the states' plans for standardized testing in the 2020/21 school year, the WestEd team began exploring possible solutions. The most viable solution was to give districts the option of administering the multiple-choice portion of the Smarter Balanced ELA/Literacy ICA in lieu of the Smarter Balanced ELA/Literacy Summative Assessment. WestEd promptly reached out to districts to determine whether or not they planned to administer the Smarter Balanced ELA/Literacy Summative Assessment. Ultimately, 11 (65%) out of 17 schools opted to administer the Smarter Balanced ELA/Literacy Summative Assessment, and 6 (35%) opted to administer the multiple-choice portion (i.e., the Non-Performance Task portion) of the Smarter Balanced ELA ICA, which resulted in there being two separate outcome measures for grade 11.

The outcome measure in grade 12 for the evaluation was set up to be one-half of a full Smarter Balanced ELA ICA. 11 WestEd contracted with Cambium Assessments to set up an online platform where teachers could administer the assessment to students. The assessment could be administered through online video conferencing technology (for students in distance learning) or in person. Participating grade 12 students were to take either the Performance Task portion of the ELA ICA or the Non-Performance Task portion of the ELA ICA. Additional details about the outcome measures are provided in the impact evaluation chapter.

¹¹ The study used students' results on half of a Smarter Balanced ICA as the outcome measure for grade 12 in the 2020/21 school year, due to the limited instructional minutes as a result of the COVID-19 pandemic.



2. ERWC Theory of Action

The theory of action underlying the ERWC directly informed how this study evaluated the ERWC's implementation and impact, as the theory of action informs all aspects of the ERWC and its development.

The ERWC theory of action posits that the curriculum and associated professional learning will enable grades 11 and 12 teachers to support students' ability to communicate effectively across genres for varied purposes, audiences, and occasions. This effect in turn will increase the quality of students' literacy learning opportunities, leading to enhanced academic achievement and readiness for college, career, and civic engagement.

The ERWC Steering Committee established eight key principles (California State University, n.d.) for the curriculum:

- 1. The integration of interactive reading and writing processes
- 2. A rhetorical, inquiry-based approach that fosters critical thinking and engagement through a relentless focus on the text
- 3. Materials and themes that engage student interest
- 4. A student-centered approach that emphasizes student agency and metacognition
- **5.** Classroom activities designed to model and foster successful practices of fluent readers and writers
- **6.** Research-based methodologies with a consistent relationship between theory and practice
- **7.** Built-in flexibility to allow teachers to support students' development as expert learners and respond to instructional contexts
- **8.** Alignment with California Standards for English Language Arts and English Language Development

The inputs, outputs, and outcomes of the theory of action are shown in Figure 2.1.



Figure 2.1 Expository Reading and Writing Curriculum Theory of Action

Goals

- Equip students at grades 11 and 12 with strong critical reading, writing, and language skills based on college- and career-ready standards
- Improve students' ability to be successful in college-level English coursework
- Scale the implementation of the ERWC with fidelity in a new grade and in a new state

Inputs

Curriculum and Pedagogy

- 67 modules
- Improved module activities, which incorporate metacognition, Universal Design for Learning, and integrated and designated English language development

Professional Learning

- Annual Summer Institute for ERWC teachers
- · Five individual coaching visits for teachers
- Five community of practice meetings for teachers and coaches

Educator Outputs

Educators...

- Employ an assets-based approach
- Support students in recognizing how text exists in the world, how they engage with the text, and how they can use disciplinary practices in their personal and professional lives.
- Introduce students to visual, digital, and multimodal texts as well as multi-genre texts that may blend exposition, diary entries, letters, other primary sources, and/or poetry in service of a story, essay, or argument.
- Explicitly teach rhetorical concepts, reducing scaffolding as students develop proficiency in rhetorical problem-solving and supporting students to draw their own conclusions.
- Foster a collaborative learning environment and gradually release responsibility to students for doing more of the hard work of learning, including releasing interpretive and facilitative roles to students.
- Trust students to do their own thinking and encourage them to ask their own questions.
- Encourage students to take risks, be more comfortable with uncertainty, and self-assess their abilities in order to forge their own paths to developing literacy expertise, content knowledge, and a robust sense of themselves as able learners, readers, and writers.
- Encourage students' reflection and self-assessment and provide students with a variety of options for access, including multiple means of engagement, action and expression, and representation, which lead to cultivating expert learners.
- Establish instructional routines, tools, and materials that afford students a variety of entry points into ongoing conversation.
- Emphasize the development of a conceptual vocabulary to describe rhetorical decisionmaking and provide opportunities for students to practice adapting routines of reading and writing rhetorically.

Student Outputs

Students..

- Draw on their own sociocultural experiences to make connections across diverse subjects and settings, including those outside of school.
- See themselves as rhetorical readers and writers who can use their skills to flexibly and proficiently navigate situations that arise in their personal and professional lives.
- Become more versatile readers and writers who can engage fully in the varied types of literacy practices they will encounter in a variety of postsecondary contexts, including, but not limited to, career and technical education, trade schools, community colleges, four-year universities, careers, and civil and community services.
- Become rhetorical readers and writers, allowing them to read and write effectively in new situations.
- Cultivate habits of mind that allow them to participate more fully in university-level academic work, workplace collaborations, and civic activities by sharing their thinking, making choices about which direction to go, and using their agency to advance their own learning.
- Become flexible, adaptive, and reflective thinkers and communicators.
- Become more comfortable with skills and develop confidence in their capacity, fostering intellectual growth and agency.
- Develop goals and strategies for monitoring their own progress toward completing projects as they learn, reflect on goals and strategies they use to build their repertoire as expert learners, and represent what they know in a variety of ways, including visual, multimedia, and kinesthetic means.
- Explore their positions relative to each topic and interact in many different ways with texts, their peers, and their teachers to establish and develop their perspectives.
- Develop both their practice in and conceptual knowledge of reading and writing rhetorically that will help them transfer knowledge to new reading and writing situations in their lives.

Outcomes

Outcome 1

Students who were assigned to the ERWC in grade 11 will score higher on a Smarter Balanced ELA/Literacy standardized assessment compared to students who were assigned to comparison English courses, and the difference will be statistically significant.

Outcome

Students who enrolled in the ERWC in grades 11 and 12 will score higher on a Smarter Balanced ELA/Literacy standardized assessment compared to students who enrolled in comparison English courses, and the difference will be statistically significant.

Outcome 3

Capacity is demonstrated for scaling by implementing the ERWC with fidelity, including professional learning and instruction, in more than half of the study schools.



Inputs

The following sections elaborate on the two key components of the ERWC: the curriculum and pedagogy and the professional learning.

Curriculum and Pedagogy

The ERWC 3.0 is designed to be a highly engaging curriculum for preparing students to become critical consumers of texts and genres and effective communicators. It consists of 67 modules that teachers can choose from to design a yearlong course. The activities within each module integrate reading, writing, and discussion and move from professional texts to student texts. The core structure of all the modules—the Assignment Template—progresses along what its developers call an "arc" from Reading Rhetorically (Preparing to Read, Reading Purposefully, and Questioning the Text) to Preparing to Respond (Discovering What You Think) to Writing Rhetorically (Composing Draft, Revising Rhetorically, and Editing), as depicted in Figure 2.2.

Questioning

Understanding

Preparing

Responding

Revising

Professional
Text

Student
Text

Figure 2.2 The ERWC Arc

Note. See Appendix B for more information about the ERWC Arc.



The Assignment Template outlines a scaffolded process for helping students read, comprehend, and respond to nonfiction and literary texts. It also serves as a guideline to module writers who are developing new modules. Through the Assignment Template, teachers take students through a recursive process of Reading Rhetorically, Preparing to Respond, and then Writing Rhetorically. While the Reading Rhetorically section of the arc emphasizes reading and the Writing Rhetorically section emphasizes writing, reading and writing are also interwoven throughout the modules.

Reading Rhetorically

Reading Rhetorically is meant to get students to think not only about what a text says but also about the audience to whom the text is addressed, the situation in which it was published, and the strategies writers use, so that students have models for their own writing. During this stage, the students also "write to learn" by using writing to take notes, annotate the text, map the text, make predictions, ask questions, and so on. But the students also "read like writers," meaning they pay attention to the rhetorical moves that writers make and note rhetorical strategies and genres that the students can take up when it is their turn to write. The intended outcomes of Reading Rhetorically include:

- Determining the meaning of words or phrases as they are used in a text
- Determining an author's point of view or purpose in a text
- Citing strong and thorough textual evidence to support analysis of what a text says and implies
- Analyzing how ideas, events, and/or narrative elements interact and develop over the course of a text
- Analyzing and evaluating the structure an author uses in the writer's exposition or argument
- Analyzing an author's assumptions and appeals (e.g., ethos, pathos, and logos)
- Analyzing the extent to which the writer's arguments anticipate and address reader concerns and counterclaims
- Analyzing the writer's use of rhetorical devices and strategies
- Understanding, through analysis of texts, key rhetorical concepts such as audience, purpose, context, and genre
- Learning to read against the grain so that the students can discern what they believe and disagree with while reading a text



Preparing to Respond

During the Preparing to Respond phase, which represents the transitional stage between reading and writing, the students' reading informs and guides their writing as they shift from being an audience for the writing of others to engaging in a conversation about the ideas and issues as writers themselves who are addressing their own audience. The transition phase from reading to writing provides students with an opportunity to analyze the information they have gathered during their reading, assess the value of this information, and begin to formulate their own arguments.

Writing Rhetorically

In Writing Rhetorically, students are asked to consider the importance of audience, purpose, ethos, situation, message, and genre as they write to address, as much as possible, real audiences and to generate real purposes. During the Writing Rhetorically phase, students compose a draft, revise rhetorically, and edit their draft. The key intended outcomes of Writing Rhetorically are the following:

- Write a variety of text types for real audiences and purposes, making effective rhetorical choices in light of those audiences and purposes
- Contribute to an ongoing conversation in ways that are appropriate to the academic discipline and context
- Write arguments in response to readings to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence
- Develop academic, analytical essays that are focused on a central idea and effectively organized
- Incorporate the texts of others effectively and use documentation styles suitable to the task, genre, and discipline
- Edit for clarity and for standard written English grammar, usage, and mechanics
- Select words and phrases that express precise meaning concisely and effectively, taking into consideration the rhetorical purpose of the text
- Produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience
- Demonstrate the ability to observe, evaluate, and regulate one's development as a writer of expository texts, including the identification of areas needing further growth
- Revise texts as a whole and at the sentence and paragraph level
- Review peers' work and respond to peers' feedback on writing



Modules

During Pilot Year 1, grade 11 and grade 12 ERWC teachers were expected to teach six full-length modules and five mini-modules. From among the full-length modules, grade 11 teachers were expected to teach two issue modules, one book module, one drama module, one foundational document module, and one research module. Grade 12 teachers were expected to teach three issue modules, one book module, one drama module, and one research module for their full-length modules. Grades 11 and 12 ERWC teachers could teach any five of the minimodules in their grade level.

During Pilot Year 2 and the Evaluation Year, grade 11 and grade 12 ERWC teachers were expected to teach five full-length modules, three mini-modules, and two portfolio modules. Of the full-length modules, grade 11 teachers were expected to teach two issue modules, one book module, one drama module, and one foundational document module. Grade 12 teachers were expected to teach three issue modules, one book module, and one drama module for their full-length modules. Grades 11 and 12 ERWC teachers could teach any three of the minimodules in their grade level.

Table 2.1 displays the final numbers of modules, by type, from which teachers could choose in grade 11 and grade 12, as published in ERWC 3.0.

Table 2.1 Numbers of Modules in Grade 11 and Grade 12 Published in the ERWC 3.0

Module Type	Grade 11	Grade 12	Grades 11 and 12
Full-Length	26	25	-
Book	5	7	-
Drama	2	2	-
Foundational Document	3	-	-
Issue	16	16	-
Mini	-	-	14
Portfolio	2	2	-
Total	28	27	14



Professional Learning

The professional learning component was designed to support teachers to effectively implement the ERWC. It consists of three types of professional learning: the ERWC Summer Institute in the summer prior to teaching the curriculum, coaching throughout the school year, and participation in community of practice (CoP) meetings throughout the school year.

Summer Institute

The ERWC Summer Institute consisted of two to five days of professional learning, with the number of days dependent on the teacher's previous experience teaching the ERWC and the year of the study. Coaches were encouraged to attend a Summer Institute with the teachers they would be coaching in order to discuss problems of practice, facilitate teacher goal-setting, and support planning for the upcoming school year. During the Summer Institute, teachers learned about the updated curriculum, planned for the upcoming school year, and refined their understanding of the pedagogical approaches that support delivery of the curriculum.

In Pilot Year 1, participating teachers were required to attend a Summer Institute. There were 10 Summer Institutes offered between May and August 2018, each lasting three to four days, hosted by the FCSS. Nine Summer Institutes took place throughout California at locations convenient for teachers, and one took place in Seattle, Washington. California teachers not previously certified to teach the ERWC were required to attend four full days. Those previously certified were required to attend three full days. All teachers in Washington were required to attend four full days because none of the Washington teachers had previously been ERWC certified.

In Pilot Year 2, the FCSS hosted 10 Summer Institutes between May 2019 and August 2019; nine were held throughout California at locations convenient for participating teachers, and one was held in Seattle, Washington. ERWC teachers who were new to the grant were required to attend three full days of in-person professional learning, and teachers who had participated in Pilot Year 1 were required to attend two and a half days. Teachers who were not able to attend for part or all of a day were assigned make-up work.

In the summer prior to the Evaluation Year, from May 2020 through August 2020, the FCSS hosted seven Summer Institutes. Due to the COVID-19 pandemic, all of these institutes took place virtually through online videoconferencing. Each Summer Institute lasted two days. A mix of synchronous and asynchronous learning took place.



The Summer Institute learning goals for each year of the study are displayed in Table 2.2.

Table 2.2 Summer Institute Learning Goals for Pilot Years 1 and 2 and Evaluation Year

Pilot Year 1	Pilot Year 2	Evaluation Year
Examine ERWC pedagogy and indicators of effective implementation	8. Design (or revise) lesson plans for Phase 1 modules	15. Explore lessons learned from Pilot Year 2
implementation2. Examine the course structure and module overviews	 Examine ERWC pedagogy and indicators of effective implementation 	16. Set teaching goals for continued professional growth based on the ERWC's theoretical foundations
3. Experience a module and become familiar with module types and topics	Examine the course structure and map two-year ERWC plan	17. Refine the course design for grade 11 and/or grade 12 in 2020/21
4. Explore the ERWC 3.0 Assignment Template and key instructional practices	11. Explore lessons learned from Pilot Year 112. Investigate deeper reading, discussion protocols, and	18. Review study requirements for implementation and record-keeping
5. Identify features of effective ERWC classrooms	English language 13. Review study requirements	19. Share best practices for implementing ERWC 3.0
6. Investigate rhetorical reading, writing, and inquiry processes	for implementation and record-keeping	20. Improve road maps of effective implementation for teachers of
 Select modules to teach and begin planning for the first semester 	14. Share best practices from ERWC 3.0	ERWC in face-to-face or virtual settings

Coaching

ERWC coaching sessions occurred five times over the course of the school year. Each coaching cycle consisted of a planning conversation, a classroom visit from the coach, and a reflective conversation between the coach and the teacher. Each teacher was assigned a coach who had experience with the ERWC and was either a teacher, a teacher on special assignment, a district administrator, a county office of education staff member, a college professor, or a college professor emeritus.

Although coaches had some flexibility in carrying out their role, the expectation was that coaching cycles were nonevaluative and inquiry-based. Due to school closures in response to COVID-19 in Pilot Year 2, coaching sessions were held virtually from March 2020 through the end of that school year.



Community of Practice Meetings

The ERWC CoP meetings provided an opportunity for teachers to come together to discuss successes and challenges teaching the curriculum, review student work, and collaboratively solve problems of practice. CoP meetings usually took place at the school site, but some were held at the district or regional level. Due to school closures in response to COVID-19 in Pilot Year 2, CoP meetings were held virtually from March 2020 through the end of that school year.

Outcomes for Educators and for Students

Implementation of the ERWC 3.0 is expected to support teacher development and enhance teacher practice. Changes in teacher mindsets and practices are expected to generate a set of changes in student attitudes, perceptions, experiences, and behaviors. The ERWC Theoretical Foundations for Reading and Writing Rhetorically (Katz et al., 2020) describe the theory behind the curriculum and orient educators to suggested dispositions and attitude toward students, which derive student outputs. This study used students' scores on standardized achievement tests to measure the ERWC's impact on student outputs.



3. Description of the Comparison Courses

The ERWC was evaluated against a group of comparison courses, or "business-as-usual" courses, which were the standard English courses approved by teachers' districts. ¹² The comparison courses varied widely from teacher to teacher, and sometimes varied even within schools. Most teachers in the comparison group reported using one of the five major commercial curricula listed in this section. ¹³

The following are short descriptions of the main commercial curricula that were used by teachers of the comparison English courses, including descriptions by EdReports.org of each curriculum's strengths and weaknesses.¹⁴

CollegeBoard: SpringBoard (2018 Edition)

Pedagogical Focus: SpringBoard offers a student-centered learning approach which focuses on "close observation and analysis of texts, evidence-based writing, higher-order questioning, and engaging academic conversation" (The College Board, n.d.c). SpringBoard is comprised of four units in both grade 11 and grade 12 (The College Board, 2021a, 2021b). The grade 11 curriculum is centered around "The American Dream," and grade 12 concerns the theme "Perspective" (The College Board, n.d.b).

Teacher Professional Learning: Schools and districts can partner with The College Board for administrator workshops, a Summer Institute spanning multiple summers, coaching services, and one-day intensive seminars (College Board, n.d.a). Virtual professional development is also available.

EdReports.org Excerpt: "The materials include appropriately rigorous texts to engage students in reading and writing as well as working to build research skills. Tasks and questions provided offer students practice in academic speaking and listening as well as comprehensive writing skills development over the course of the school year. The materials are designed to grow students'

¹² Though many districts had an approved curriculum, findings from WestEd surveys and interviews suggest that many teachers chose other instructional materials or significantly adapted the approved curriculum.

¹³ Two teachers reported using McDougal Littell: American Literature, and two teachers reported using Prentice Hall Literature: The American Experience.

EdReports.org is a nonprofit that reviews curricula to inform educators' decisions about which curriculum to adopt. The descriptions of curricula provided here are for a particular edition that may not be identical to the edition used by comparison teachers. Editions described are those most recently published prior to the 2019/20 school year.



knowledge and academic vocabulary as they engage with increasingly rigorous texts and tasks" (EdReports, 2018a).

Holt: Literature and Language Arts (2012 Edition)

Pedagogical Focus: This is a scaffolded curriculum with an emphasis on critical thinking (Textbooks.com, n.d.). There are five units in the grade 11 curriculum (SAUSD, 2017). Texts include literature classics and nonfiction texts. Digital tools include audio features, assessments, and teacher planning (Textbooks.com, n.d.).

Teacher Professional Learning: Information on teacher support for this curriculum was not readily available. Teachers did have support through a teacher's guide and online tools (AbeBooks, n.d.).

EdReports.org Excerpt: "The texts and tasks partially meet the demands to support students' development of literacy skills in reading, writing, speaking and listening, and language. While materials do include texts that are organized to support students' understanding of topics and/or themes, the materials only partially meet the expectations of comprehensive support for writing, vocabulary development, and text-based questions and tasks that build critical thinking and grow knowledge" (EdReports, 2017a).

Houghton Mifflin Harcourt: Collections (2017 Edition)

Pedagogical Focus: Collections is organized around selections of texts on a topic or theme. The curriculum emphasizes high-quality, engaging texts (Houghton Mifflin Harcourt, n.d.a). The grade 11 curriculum consists of six units. Students are asked to do "chunked" close reading of selections, then respond to after-reading questions to check for understanding. In more recent editions, a digital platform hosts online lessons, a peer review platform, and annotation tools (Houghton Mifflin Harcourt, n.d.b).

Teacher Professional Learning: Schools and districts can purchase online studio and professional learning sessions (Houghton Mifflin Harcourt, n.d.b).

EdReports.org Excerpt: "High-quality anchor texts and tasks are coupled with text-focused writing and some speaking and listening work. Core standards practice is included for students to practice grade-level reading, writing, speaking and listening, and language skills with appropriately rigorous and engaging texts. The materials inconsistently provide students cohesive practice with synthesizing multiple skills, although the texts do provide some support to build student knowledge around topics and themes and bolster academic vocabulary" (EdReports, 2017b).



McGraw-Hill: StudySync (2017 Edition)

Pedagogical Focus: StudySync offers a mix of classical and contemporary texts for student engagement. In both Grades 11 and 12, there are four units that last for approximately 45 days each. Skill lessons are embedded in writing tasks and discussion prompts. Digital tools include short TV episodes, movie-like previews, assessments, and peer review (McGraw-Hill, n.d.a).

Teacher Professional Learning: Weekly initial and advanced trainings are offered online, covering a range of topics (McGraw-Hill, n.d.b). Additional support can be coordinated.

EdReports.org Excerpt: "The materials include rich and rigorous texts used with reading, writing, speaking, and listening work that builds students' knowledge while developing their overall literacy. The materials include support for students to practice and apply research skills, integrating multimodal texts throughout the year. The materials include supports for teachers to implement for specific classrooms. In addition to being delivered entirely online, teachers can customize texts, lessons, and activities directly through the site based on classroom and individual students' needs" (EdReports, 2018b).

Savvas (formerly Pearson): MyPerspectives (2017 Edition)

Pedagogical Focus: Savvas describes its MyPerspectives curriculum as "engaging, interactive, relevant and student-centered" (Savvas, n.d.b). In grade 11, there are six units throughout the year. Writing tasks have embedded skills practice. There is an emphasis on high-quality, diverse texts. Students may take advantage of digital tools, including unit-opener videos, a rubric scoring tool, and an interactive version of the textbook (Savvas, n.d.a).

Teacher Professional Learning: Teachers and leaders can choose from a range of professional development options, including early implementation resources, workshops and tutorials, coaching and support for administrators (Savvas, n.d.c).

EdReports.org Excerpt: "The materials provide students cohesive support and practice as they grow their skills in reading, writing, speaking and listening, and language. The materials include texts that reflect the appropriate demand and rigor required by the standards for the grade band" (EdReports, 2017c).

Ratings of the Curricula Most Commonly Used for the Comparison Course

EdReports.org gives curricula a rating in three categories, which are referred to as "gateways":

- Text Quality
- 2. Building Knowledge
- **3.** Usability



For the first two gateways, ratings range from 0 to 32. Ratings from 0 to 15 mean "Does Not Meet Expectations," ratings from 16 to 27 mean "Partially Meets Expectations," and ratings from 28 to 32 mean "Meets Expectations." Ratings for Gateway 3 range from 0 to 34. Ratings from 0 to 23 mean "Does Not Meet Expectations," ratings from 24 to 29 mean "Partially Meets Expectations," and ratings from 30 to 34 mean "Meets Expectations."

If a curriculum receives a rating of "Does Not Meet Expectations" in Gateway 1, it does not receive a rating for Gateways 2 and 3. If a curriculum receives a rating of "Does Not Meet Expectations" for Gateway 2, it does not receive a rating for Gateway 3. For more information about the ratings, see EdReports.org Quality Instructional Materials Tool: English Language Arts High School Review Tool. Table 3.1 displays the EdReports.org rating for each curriculum in each category.

Table 3.1 EdReports.org Rating for Each Curriculum in Each Category

Curriculum	Gateway 1: Text Quality and Complexity, and Alignment to Standards With Tasks Grounded in Evidence	Gateway 2: Building Knowledge With Texts, Vocabulary, and Tasks	Gateway 3: Instructional Supports and Usability
CollegeBoard: Springboard (2018)	31***	32***	34***
Holt: Literature and Language Arts (2012)	21**	8*	Not Rated
Houghton Mifflin Harcourt: Collections (2017)	29***	18**	Not Rated
McGraw-Hill: StudySync (2017)	32***	32***	32***
Savvas: MyPerspectives (2017)	32***	32***	34***

Note. *** indicates "Meets Expectations"; ** indicates "Partially Meets Expectations"; * indicates "Does Not Meet Expectations."



4. Study Sample

Schools

The study sample included 49 schools, consisting of 43 high schools across 26 school districts in California and 6 high schools across 6 school districts in Washington. Recruitment of schools in California was led by WestEd researchers, with support provided by the CSU and the FCSS. Because one of the purposes of the i3 grant was to expand the reach of the ERWC beyond California to the state of Washington, recruitment of schools was also led by the OSPI in Washington and supported by WestEd researchers.

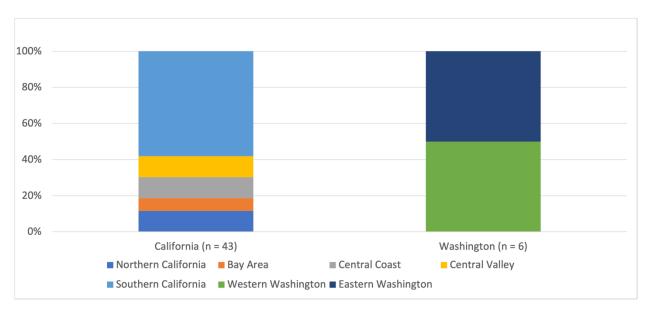
Recruitment took place from June 2017 through March 2018. Researchers used convenience and snowball sampling to recruit participants. Specific recruitment strategies differed in California and Washington. In California, researchers targeted schools already implementing the ERWC, as schools already familiar with the course may have been more willing to meet the requirements of the grant. In Washington, the OSPI targeted schools that had piloted ERWC modules through the state's Bridge to College English courses.

To be eligible to participate, districts had to meet the following requirements: (1) allow WestEd to conduct a student-level RCT within the school and (2) provide student-level data a few times throughout the study. Additionally, high schools had to meet the following study requirements: (3) have a minimum enrollment of 1,000 students; (4) identify at least two teachers to implement the revised grade 12 ERWC and at least two teachers to implement the newly developed grade 11 ERWC; (5) allow grade 11 students who elect to take the standard college preparation English 11 course to be randomly assigned into either the ERWC or the comparison English curriculum; (6) administer a student assessment in grades 11 and 12. Lastly, teachers had to be willing to (7) attend ERWC professional learning; (8) participate in research activities; and (9) administer assessments to students one to three times throughout the study. In exchange for meeting these expectations, schools and teachers received the following benefits: stipends; all of the curriculum materials, including copies of the student readers and novels; and free professional learning.

All of the schools included in the study were public high schools. Refer to Figure 4.1 for the geographic locations of the 49 high schools in the study, and refer to Figure 4.2 for their locales.

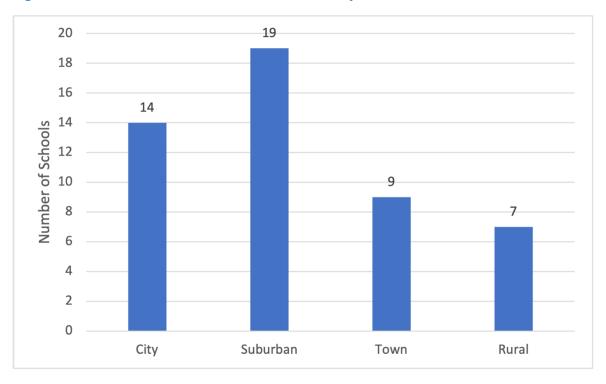


Figure 4.1 Geographic Locations of the 49 Schools in the Study



Note. The schools' geographic locations were categorized by WestEd researchers.

Figure 4.2 Locales of the 49 Schools in the Study



Source: National Center for Education Statistics, 2018



Table 4.1 displays characteristics of the study schools.

Table 4.1 Characteristics of the 49 Schools in the Study

Characteristic	Minimum	Maximum	Mean	Median
Student Enrollment	841	4,179	1,953	1,837
Percentage of English Language Learners	0%	30%	12%	10%
Percentage Eligible for Free or Reduced-Price Meals	15%	93%	66%	72%
Percentage Proficient in ELA	30%	78%	56%	56%
Percentage Proficient in Math	10%	52%	28%	27%
Percentage African American	0%	16%	4%	3%
Percentage American Indian or Alaska Native	0%	4%	0%	0%
Percentage Asian	0%	44%	4%	2%
Percentage Hispanic or Latino	10%	95%	61%	68%
Percentage Pacific Islander/ Filipino	0%	8%	2%	1%
Percentage White Not Hispanic	0%	79%	25%	17%
Percentage Two or More Races	0%	11%	3%	2%

Note. Calculations for student enrollment, English language learners, free- or reduced-price meal status, and race/ethnicity are based on 2019/20 reports extracted from DataQuest (https://dq.cde.ca.gov/dataquest/), the California Department of Education's web-based data reporting system, and the Washington Office of Public Instruction's data portal (Washington Office of Superintendent of Public Instruction, 2020). For California, calculations for percentage proficient in ELA and math are based on 2018/19 reports for grade 11 students, extracted from the California Assessment of Student Performance and Progress website (https://caaspp-elpac.cde.ca.gov/caaspp/). For Washington, calculations for percentage proficient in ELA and math are based on 2018/19 reports for grade 10 students, extracted from the Washington Office of Superintendent of Public Instruction's data portal. The benchmark for both states is the Smarter Balanced ELA/Literacy Summative Assessment. Students take the assessment in grade 11 in California and in grade 10 in Washington. Data are from the 2018/19 school year because students did not take the assessment in the 2019/20 school year due to the COVID-19 pandemic.



ERWC Participants

During each pilot year of the i3 Validation grant, the ERWC 3.0 was offered to approximately 15,000 students in grades 11 and 12 in the 49 study schools across California and Washington. A total of 189 teachers piloted the ERWC 3.0 in Pilot Year 1 and 198 teachers piloted the ERWC 3.0 in Pilot Year 2. During the Evaluation Year (2020/21), the ERWC 3.0 was offered to approximately 15,000 students in grades 11 and 12 in 46 study schools across California and Washington, and a total of 141 teachers participated (see Figure 4.3).

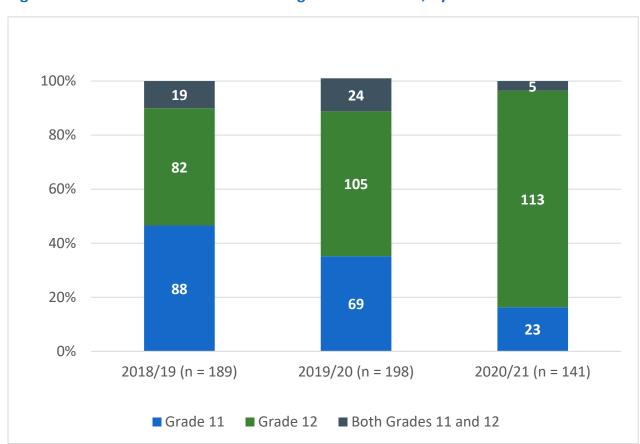


Figure 4.3 Number of Teachers Who Taught the ERWC 3.0, by Grade and School Year

The sections of this report that focus on the implementation study mostly discuss the ERWC 3.0 as a whole rather than differentiating between grade 11 and grade 12 implementation because implementation of the grade 11 ERWC was largely similar to that of the grade 12 ERWC and because the fundamental strategies and concepts are similar across the two grades.¹⁵

¹⁵ The Common Core State Standards use two-year grade bands in grades 9 through 12, so that one set of standards covers the two years of grades 9 and 10 and another set of standards covers the two years of grades 11 and 12.

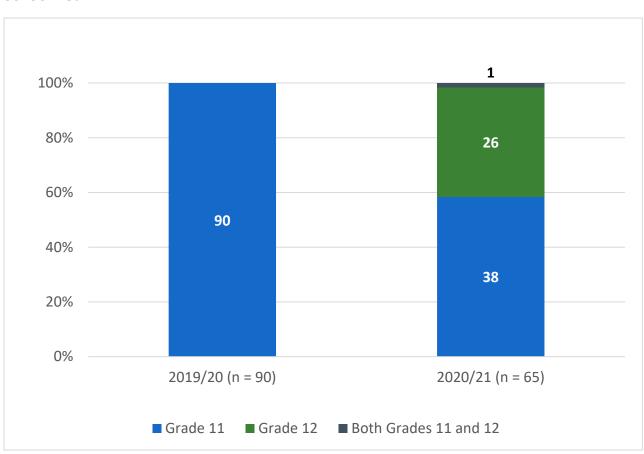


Comparison Curriculum Participants

During Pilot Year 1, the comparison courses were offered to approximately 8,000 students. Fewer students were enrolled in the comparison courses compared to the ERWC because many schools have adopted the ERWC as the only college-preparatory English course in grade 12; students at those schools did not have the option to take a comparison course.

In Pilot Year 2, 90 teachers taught the comparison course in grade 11.¹⁶ In the 2020/21 school year, 65 teachers taught comparison courses in grades 11 and 12 (see Figure 4.4).

Figure 4.4 Number of Teachers Who Taught Comparison Courses, by Grade and School Year



¹⁶ No study teachers taught the comparison course in grade 12 because the 2019/20 school year was not an evaluation year in grade 12. That is, this was a pilot year for ERWC teachers.



Prevalence of Commercial Comparison Curriculum

A survey of comparison course teachers in each year and grade of the evaluation reveals the prevalence of the commercial comparison course curriculum. In Pilot Year 2, among the grade 11 teachers who completed a survey about which curriculum or curricula they used, 60 (64%) of 94 reported using at least some of a commercial curriculum adopted by their district. (Note: Grade 12 teachers were not surveyed in Pilot Year 2, given that this was a pilot year for the ERWC.) Among grade 11 and grade 12 comparison course teachers responding to the same survey in the Evaluation Year, 20 (57%) of 35 grade 11 teachers and 9 (50%) of 18 grade 12 teachers reported using a commercial curriculum. Overall, teachers in the Evaluation Year, across both grade levels, reported less use of commercial curriculum than in Pilot Year 2 (see Table 4.2). In addition, a few specific curricula were less commonly reported in the Evaluation Year than in Pilot Year 2, including in particular Savvas: MyPerspectives and Holt: Literature and Language Arts (Table 4.2).



Table 4.2 Number and Percentage of Comparison Teachers Surveyed Who Reported Teaching Each Curriculum in Each Reported Year

Curriculum	Pilot Year 2, Grade 11: Number	Pilot Year 2, Grade 11: Percentage	Evaluation Year, Grade 11: Number	Evaluation Year, Grade 11: Percentage	Evaluation Year, Grade 12: Number	Evaluation Year, Grade 12: Percentage
No Curriculum	30	32%	15	42%	9	43%
CollegeBoard: Springboard	4	4%	2	6%	3	14%
Holt: Literature and Language Arts	21	22%	1	3%	5	24%
Houghton Mifflin Harcourt: Collections	17	18%	5	14%	1	5%
McGraw-Hill: StudySync	8	9%	6	17%	1	5%
Savvas: MyPerspectives	10	11%	4	11%	1	5%
Other	4	4%	3	8%	1	5%

Note. Some teachers reported teaching multiple curricula.

Use of Commercial and Noncommercial Comparison Curriculum

Districts have varied requirements for how much of an adopted curriculum teachers must use. Some districts require teachers to teach the adopted curriculum as written, whereas others allow teachers complete flexibility in what to teach. Some teachers in the comparison group of this study reported using some of the texts in the district's adopted textbook, but they taught the material in ways different from those prescribed. Some teachers also reported supplementing the texts provided in the textbook.



In Pilot Year 2, of the 60 comparison group teachers who reported using an adopted curriculum, 38 teachers (63%) reported using it in combination with at least one other curriculum. Among the 21 grade 11 teachers and the 12 grade 12 teachers who reported using an adopted curriculum in the Evaluation Year, 9 (43%) and 12 (100%) teachers respectively reported using it in combination with at least one other curriculum. With the exception of grade 11 teachers in the Evaluation Year, most comparison teachers taught adopted curricula in combination with other curricula (see Table 4.3).

Table 4.3 Number and Percentage of Comparison Teachers Reporting Use of Adopted Curriculum, by Category Across All Reported Years

Curriculum	Pilot Year 2, Grade 11 (n = 60): Number	Pilot Year 2, Grade 11 (n = 60): Percentage	Evaluation Year, Grade 11 (n = 21): Number	Evaluation Year, Grade 11 (n = 21): Percentage	Evaluation Year, Grade 12 (n = 12): Number	Evaluation Year, Grade 12 (n = 12): Percentage
Adopted Curriculum in Combination With Other Curriculum	38	63%	9	43%	12	100%
Created by the District	9	15%	1	5%	3	25%
Created by Teachers at the School	18	30%	7	33%	8	66%
Created by the Teacher	35	58%	7	33%	9	75%
Other	5	8%	2	10%	4	33%
Adopted Curriculum Only	22	37%	12	57%	0	0%

Note. Some teachers reported using multiple other curricula.



In Pilot Year 2, of the 94 teachers responding to the survey, 34 (36%) did not report using a commercial curriculum adopted by their district. In the Evaluation Year, 15 (43%) of the 35 grade 11 surveyed teachers and 9 (50%) of the 18 grade 12 surveyed teachers did not report using a commercial curriculum. Teachers who did not report using a commercial curriculum most often reported using a curriculum that they created, though some reported using multiple other curricula (see Table 4.4).

Table 4.4 Curriculum Used Among Those Comparison Teachers Who Did Not Report Using a Commercial Curriculum

Curriculum	Pilot Year 2, Grade 11 (n = 34): Number	Pilot Year 2, Grade 11 (n = 34): Percentage	Evaluation Year, Grade 11 (n = 15): Number	Evaluation Year, Grade 11 (n = 15): Percentage	Evaluation Year, Grade 12 (n = 0): Number	Evaluation Year, Grade 12 (n = 0): Percentage
Created by the District	5	15%	3	20%	0	0%
Created by Teachers at the School	16	47%	8	53%	0	0%
Created by the Teacher	20	59%	10	67%	0	0%
Other	7	21%	5	33%	0	0%

Note. Some teachers reported using multiple other curricula.



Curriculum and Pedagogical Approaches of Comparison Course

The curriculum and pedagogical approaches that the comparison course teachers described in interviews varied widely.

In Pilot Year 2, most English 11 comparison course teachers reported teaching a combination of full-length pieces, expository texts (including foundational documents), short stories, and poetry. Teachers reported teaching some of the same full-length pieces that are included in the ERWC, such as *The Things They Carried* and *The Crucible*. However, they also reported teaching many full-length pieces that are not included in the ERWC, such as *The Scarlet Letter*, *Huckleberry Finn*, and *The Kite Runner*. English 12 comparison teachers in the Evaluation Year also reported using various full-length texts, including *Brave New World*, *Frankenstein*, and *Othello*.

In addition, in Pilot Year 2, most comparison teachers reported that they incorporated rhetorical analysis during the foundational documents units, but it was not a focus throughout the school year. In focus groups, English 11 comparison students reported that their English course had focused on vocabulary. This focus was confirmed by English 11 comparison teachers in interviews, many of whom shared that they had given vocabulary quizzes.

Use of Online Learning Systems for Comparison Course

Starting in the Evaluation Year, all participating teachers facilitated at least some online learning during the school year. The most common system for both English 11 and 12 was Google, though Canvas was also common, particularly among English 12 teachers. Some teachers reported using multiple systems (see Table 4.5).



Table 4.5 Learning Management System That Teachers Reported Using for Online Learning in the Evaluation Year, by Grade

Learning Management System	Grade 11 (n = 35): Number	Grade 11 (n = 35): Percentage	Grade 12 (n = 18): Number	Grade 12 (n = 18): Percentage
Canvas	12	34%	11	61%
Google	23	66%	12	67%
Schoology	1	3%	2	11%

Note. Some teachers indicated that they used multiple learning management systems.

In the Evaluation Year, teachers in both grades also indicated that they included articles from websites such as CommonLit and Newsela. Teachers also shared that they used various online tools, such as Study.com and Edgenuity.

In the Evaluation Year interviews, comparison teachers in both grades described how they had created their own curricula. One teacher shared how creating a curriculum helps the teacher have ownership over it: "I like to make up a lot of my own, which is extremely time consuming. But that's how I put my own feel and stamp on it." Other teachers indicated that they were dissatisfied with the curriculum provided by the district, which is why they created their own.



5. ERWC Implementation Evaluation

Data Sources and Methodology

To gauge levels of ERWC implementation in Pilot Year 1, Pilot Year 2, and the Evaluation Year, the research team assessed the following:

- 1. Fidelity to the instructional model. What was the level of ERWC teacher participation in required professional learning experiences? How much of the curriculum did teachers teach?
- **2. Participants' perceptions of successes and challenges.** What key successes and challenges did ERWC teachers, students, and coaches report from their experiences?

Fidelity to Instructional Model

The success of the implementation of the ERWC depends on how fully and effectively it is taught—i.e., fidelity to the instructional model. To assess fidelity of the implementation of the curriculum during all three years of the evaluation, WestEd examined whether teachers participated in the required ERWC professional learning and how much of the curriculum was taught during the school year.

Teacher Participation in the ERWC Professional Learning

To understand the extent to which teachers participated in the ERWC professional learning, the evaluation team collected the data from the following sources:

- **Summer Institute Logs**: Teachers and coaches signed a paper attendance log every day they attended the Summer Institute.
- **Coaching Logs**: Coaches submitted notes digitally through a Smartsheet platform after coaching each teacher so that each coaching session was documented.
- **Community of Practice Logs**: Site leads submitted a CoP log after holding each CoP meeting so that each meeting was documented. Each CoP log included a list of participants.



To assess whether teachers met the requirements for participation in each of these three professional learning components, WestEd compared each teacher's attendance with the requirements set by the ERWC Steering Committee.

How Much of the Curriculum Teachers Taught

Requirements for how much of the curriculum teachers needed to teach over the course of the school year were established by the ERWC Steering Committee. In order to measure how much of the curriculum was taught, WestEd examined which activities were taught within the Assignment Template, the central organizing structure of the ERWC modules.

The Assignment Template contains 29 elements, as listed in Figure 5.1.



Figure 5.1 The ERWC Assignment Template

Reading Rhetorically
Drenaring to Pead

Preparing to Read

- 1. Getting Ready to Read
- 2. Exploring Key Concepts
- 3. Surveying the Text
- 4. Making Predictions and Asking Questions
- 5. Understanding Key Vocabulary
- 6. Creating Personal Learning Goals

Reading Purposefully

- 7. Reading for Understanding
- 8. Annotating and Questioning the Text
- 9. Negotiating Meaning
- 10. Examining the Structure of the Text
- 11. Considering the Rhetorical Situation
- 12. Analyzing Rhetorical Grammar
- 13. Analyzing Stylistic Choices

Questioning the Text

- 14. Summarizing and Responding
- 15. Thinking Critically
- 16. Synthesizing Multiple Perspectives
- 17. Reflecting on Your Reading Process

Preparing to Respond

Discovering What You Think

- 18. Considering Your Task and Your Rhetorical Situation
- 19. Gathering Relevant Ideas and Materials
- 20. Developing a Position

Writing Rhetorically

Composing a Draft

- 21. Making Choices about Learning Goals
- 22. Making Choices as You Write
- 23. Negotiating Voices

Revising Rhetorically

- 24. Analyzing Your Draft Rhetorically
- 25. Gathering and Responding to Feedback

Editing

- 26. Editing Your Draft
- 27. Preparing Your Draft for Publication
- 28. Reflecting on Your Writing Process
- 29. Reflecting on Your Learning Goals



The Steering Committee defines fidelity as having taught at least one element in each of the first five strands identified in the Assignment Template (Preparing to Read, Reading Purposefully, Questioning the Text, Discovering What You Think, and Composing a Draft) and at least one element within either of the final two strands of the Assignment Template (Revising Rhetorically and Editing). For example, if a teacher taught activities in six of the seven strands, and the one strand from which the teacher did not teach an activity was the "Questioning the Text" strand, then for the purpose of calculating fidelity of implementation, WestEd defines this teacher as not having taught this module with fidelity.

To understand how much of the curriculum each teacher taught, WestEd had teachers complete an online survey each time they finished teaching a module. Developed by WestEd researchers and administered through the Qualtrics platform, the survey asked teachers to respond to a number of questions about the module they had just finished teaching. (See Appendix D for a list of the module survey questions.) The survey began by asking to what degree the module was engaging for students and how many class periods it took the teacher to teach the module. Next, the survey asked the teacher to indicate which activities were taught and to describe any major modifications the teacher made to each activity. The final questions addressed teachers' perceptions of successes and challenges in teaching the module. Based on teachers' comments and the nature of the questions in the survey, it is estimated that the survey for each module took approximately 30 minutes to complete.

For Pilot Year 1, both grade 11 and grade 12 ERWC teachers were asked to teach a total of 11 modules—six full-length modules and five mini-modules. Teachers were also asked to teach modules in specific categories. Grade 11 teachers were asked to teach at least one book module, one drama module, one foundational document module, two issue modules, five minimodules, and one research module. Grade 12 teachers were asked to teach one book module, one drama module, three issue modules, five mini-modules, and one research module. (See Appendix A for a list of all modules by grade, as published in the ERWC 3.0.)

For Pilot Year 2 and the Evaluation Year, grade 11 and grade 12 ERWC teachers were asked to teach a total of 10 modules—five full-length modules and five mini-modules. Teachers were also asked to teach modules in specific categories. Grade 11 teachers were asked to teach at least one book module, one drama module, one foundational document module, one issue module, one additional full-length module from a category of their choice, three mini-modules, and two portfolio modules. Grade 12 teachers were asked to teach one book module, one drama module, one issue module, two additional full-length modules from categories of their choice, three mini-modules, and two portfolio modules.

Module survey responses enabled WestEd to determine which modules each teacher taught as well as which activities were taught within each module. Activities in each module corresponded with what are referred to as elements in the Assignment Template. Examining the survey responses allowed WestEd to determine the number of modules each teacher taught with fidelity, as well as to tally those numbers to determine whether the teacher taught



at least 11 modules with fidelity in Pilot Year 1, at least 10 modules with fidelity in Pilot Year 2, and at least 10 modules with fidelity in the Evaluation Year. WestEd also calculated the percentages of teachers who taught each element within the Assignment Template.¹⁷

Participants' Perceptions of Successes and Challenges

In addition to examining fidelity to the instructional model, WestEd's evaluation team collected and analyzed teacher, student, and coach perceptions about the ERWC 3.0. The evaluation team asked for feedback on the experience of implementing the ERWC's components and sought teachers' and students' perspectives on whether the curriculum and accompanying changes in instructional approaches affected student engagement and/or their reading and writing skills. Each strand of data collection informed the development of research instruments in subsequent strands of data collection. Exploratory in nature, the findings provide context for findings from the impact study. Moreover, they can help the ERWC 3.0 developers understand factors that helped or hindered implementation during the study and use that knowledge to make informed adjustments to bolster the program's success.

Data Sources for Perceptions of Successes and Challenges

To gather information and participant perceptions about the ERWC 3.0 experience during all three years of the evaluation, WestEd used the data sources summarized in Table 5.1 and described in more detail in the following sections.

¹⁷ Modules typically do not include all of the elements. The percentage of teachers who taught an element was only calculated for modules that included that element.



Table 5.1 Participant Perception Data Sources

Data Source	Description
Summer Institute Surveys	Online surveys gathering ERWC teachers' and coaches' perceptions on their experiences at the Summer Institutes
Module Surveys	Surveys of ERWC teachers following completion of each module they taught, asking about their experience teaching it
Teacher Interviews	Interviews with ERWC and comparison teachers who were randomly selected to share about their experiences teaching the ERWC or the comparison course
Community of Practice Logs	Logs completed by site leads after every ERWC CoP meeting, which were designed to capture the nature of each CoP meeting and consisted of four questions about topics, activities, successes, challenges, and concerns
Coaching Logs	Logs completed by ERWC coaches after each cycle of coaching, asking six questions covering reflections, successes, challenges, next steps, and needed support
Student Focus Groups	Focus groups with ERWC and comparison students designed to gather perspectives on their experiences with the ERWC or the comparison course
Midyear Surveys	Survey administered in the middle of the school year to both ERWC and comparison teachers using distinct protocols for each group but with some overlapping questions
End-of-Year Surveys	Survey administered at the end of the school year initially to ERWC teachers only but ultimately expanded to include comparison teachers, though with a distinct protocol
Student Surveys	Survey administered to ERWC and comparison students, gathering their perceptions related to their motivation and engagement in their English courses



Tables 5.2, 5.3, and 5.4 display the data sources, the number of responses collected, the percentage of the population (if applicable), and timeline for data collection for each year of the study.

Table 5.2 Pilot Year 1 Data Sources, Number Collected, and Data Collection Timeline

Data Source	ERWC (#)	ERWC (%), If Applicable	Timeline
Summer Institute Survey	153	81%	May 2018–August 2018
Module Survey	1,023	N/A	August 2018–June 2019
Teacher Interviews	23	12%	October 2018–November 2018; February 2019–March 2019
Community of Practice Logs	242	N/A	August 2018–June 2019
Coaching Logs	258	N/A	August 2018–June 2019
Student Focus Groups	4	N/A	October 2018; February 2019– March 2019
End-of-Year Survey	179	95%	April 2019–June 2019

Note. "N/A" means not applicable.



Table 5.3 Pilot Year 2 Data Sources, Number Collected, and Data Collection Timeline

Data Source	ERWC (#)	ERWC (%), If Applicable	Comparison (#), If Applicable	Comparison (%), If Applicable	Timeline
Summer Institute Survey	151	77%	N/A	N/A	May 2019– August 2019
Module Survey	1,342	N/A	N/A	N/A	August 2019– June 2020
Teacher Interviews	22	11%	13	14%	October 2019– November 2019; February 2020
Community of Practice Logs	199	N/A	N/A	N/A	August 2019– June 2020
Coaching Logs	341	N/A	N/A	N/A	August 2019– June 2020
Student Focus Groups	4	N/A	4	N/A	September 2019; February 2020
Midyear Survey	185	94%	84	93%	December 2019– January 2020
End-of-Year Survey	191	97%	88	98%	April 2020– June 2020

Note. "N/A" means not applicable.



Table 5.4. Evaluation Year Data Sources, Number Collected, and Data Collection Timeline

Data Source	ERWC (#)	ERWC (%), If Applicable	Comparison (#)	Comparison (%), If Applicable	Timeline
Summer Institute Survey	128	91%	N/A	N/A	May 2020– August 2020
Module Survey	1,109	N/A	N/A	N/A	August 2020– June 2021
Teacher Interviews	8	6%	6	9%	September 2020– October 2020
Community of Practice Logs	219	N/A	N/A	N/A	August 2020– June 2021
Coaching Logs	288	N/A	N/A	N/A	August 2020– June 2021
Midyear Survey	141	100%	54	83%	December 2020– January 2021
End-of-Year Survey	140	99%	63	97%	May 2021– June 2021
Student Survey	251	N/A	268	N/A	April 2021

Note. "N/A" means not applicable.

Summer Institute Surveys

On the last day of each Summer Institute, participants took a 5-minute online survey, using a Google Form, on their perceptions of the Summer Institute as a professional learning opportunity.

In Pilot Year 1, 153 teachers and coaches completed the survey, which consisted of 10 items. ¹⁸ The first five items asked participants to rate aspects of the institute on a 5-point scale, from strongly disagree to strongly agree. The last five asked open-ended questions about topics teachers still had questions about, key takeaways, how the institute supported the teachers' practice, what additional support teachers needed, and what topics they might suggest for the next year's Summer Institute.

¹⁸ To encourage participants to provide honest feedback, researchers did not collect any identifiable information. Therefore, there is no data on what percentage of teachers or coaches completed the survey.



In Pilot Year 2, 151 teachers and coaches completed the survey, which consisted of eight items. The first five items asked participants to rate aspects of the institute on a 5-point scale, from strongly disagree to strongly agree. The last three asked open-ended questions about key takeaways, what additional support teachers needed, and what topics they might suggest for the next year's Summer Institute.

In the Evaluation Year, 128 teachers and coaches completed the survey. The first five items asked participants to rate aspects of the institute on a 5-point scale, from strongly disagree to strongly agree. The last three asked open-ended questions about key takeaways, what topics teachers still had questions about, and what additional support teachers needed. (See Appendix C for survey protocols.)

Module Surveys

The survey that teachers took after completing each module they taught included questions about the teacher's overall experiences teaching the module, such as the extent to which the teacher agreed with the statement, "The module provided opportunities for students to develop advanced levels of academic language at multiple levels." The final question was: "Is there anything else you would like to share regarding your experience teaching this module? Please explain." (See Appendix D for a full list of survey questions.)

In Pilot Year 1, 1,023 module surveys were completed; in Pilot Year 2, 1,342 module surveys were completed; in the Evaluation Year, 1,109 were completed. The module survey for the Evaluation Year also included the following question: "How, if at all, did you adapt the module to facilitate online discussions?"

Teacher Interviews

Teachers were randomly selected to participate in the interviews. The purpose of these interviews was to understand teachers' experiences implementing the ERWC. In Pilot Year 1, the WestEd evaluation team used a semi-structured interview protocol, consisting of 19 openended questions in the areas of background, teacher practice, student outcomes, and professional learning (see Appendix E).

Interview questions were revised for Pilot Year 2 and the Evaluation Year, although the topic areas remained similar. Each interview was conducted using online video conferencing, which allowed for virtual face-to-face interaction. Interviews were audio recorded with teachers' consent. Each took approximately 45 minutes. Interview data were then transcribed and analyzed.

In Pilot Year 1, WestEd conducted individual interviews with 23 (12%) of 189 ERWC teachers from 23 different high schools in California and Washington. ¹⁹ The first 15 interviews took place during fall 2018; another 8 interviews took place in early 2019. In Pilot Year 2, WestEd conducted individual interviews with 22 (11%) of 198 ERWC teachers and 13 (14%) of 90 English

¹⁹ Twelve interviews were completed with ERWC 11 teachers, nine interviews were completed with ERWC 12 teachers, and two interviews were completed with teachers who taught both ERWC 11 and ERWC 12.



11 teachers.²⁰ The first 20 interviews took place during fall 2019; another 15 interviews took place in early 2020. In the Evaluation Year, WestEd conducted individual interviews with 8 (6%) of 141 ERWC teachers and 6 (9%) of 65 comparison English teachers. The interviews took place at the beginning of the 2020 school year.

Community of Practice Logs

School site leads were responsible for completing a log after every CoP meeting at their school. These logs were designed to capture the nature of each meeting and consisted of four questions (Table 5.5). The CoP logs were revised for Pilot Year 2 and the Evaluation Year (see Appendix F for details).

Table 5.5. Community of Practice Log Questions, by Year

Pilot Year 1	Pilot Year 2 and Evaluation Year
What topics did you discuss or activities did you do during your ERWC CoP meeting?	Please share what you discussed or worked on during your CoP meeting.
What successes with the curriculum did you and your members discuss at the meeting?	What successes did you and your members discuss at the meeting?
What challenges with the curriculum did you and your members discuss at the meeting?	What challenges did you and your members discuss at the meeting?
Are there any concerns or needs related to the curriculum, coaching, or CoP that you and your members would like to communicate at this time?	Are there any concerns or needs related to the curriculum, coaching, or CoP that you and your members would like to communicate at this time? (Optional)

For Pilot Year 1, the WestEd evaluation team analyzed 242 CoP logs that were submitted from August 2018 through June 2019. For Pilot Year 2, WestEd analyzed 199 CoP logs that were submitted from August 2019 through June 2020. For the Evaluation Year, WestEd analyzed 219 CoP logs that were submitted from August 2020 through June 2021.

Coaching Logs

The coaching log form that coaches completed after each cycle of coaching asked coaches to respond to five to six questions (Table 5.6). The questions were revised for Pilot Year 2 and the Evaluation Year (see Appendix G for details). The revised questions reflected the flexibility in ways coaches could support teachers, given that coaching cycles had to be completed virtually.

²⁰ Eleven interviews were completed with ERWC 11 teachers, 10 interviews were completed with ERWC 12 teachers, and one interview was completed with a teacher who taught both ERWC 11 and ERWC 12.



Table 5.6 Coaching Log Questions, by Year

Pilot Year 1	Pilot Year 2 and Evaluation Year
What are your additional thoughts about the lessons and teachers' next steps?	Please describe what you discussed and/or the activities you did during the coaching sessions.
What went well during the overall coaching process?	What were your areas of focus during the coaching sessions (e.g., inquiry-based discussions, modeling, adapting modules for online instruction, etc.)?
What challenges, if any, did you experience during the coaching cycles?	What went well during the coaching process?
What are your next steps as a coach? What next steps did you communicate about with the teachers?	What challenges, if any, did you experience during the coaching process?
What support do you need in order to coach the teachers successfully?	Do you have any additional thoughts, questions, or concerns? (Optional)
Do you have any additional thoughts, questions, or concerns?	

For Pilot Year 1, the WestEd evaluation team analyzed 258 responses in the logs, submitted from August 2018 through June 2019. For Pilot Year 2, the team analyzed 341 responses in the logs, submitted from August 2019 through June 2020. For the Evaluation Year, WestEd analyzed 288 responses in logs submitted from August 2020 through June 2021.

Student Focus Groups

To learn about students' perspectives on their experiences with the ERWC 3.0, the evaluation team conducted focus groups. In Pilot Year 1, WestEd conducted two focus groups with ERWC 11 students and two focus groups with ERWC 12 students. In Pilot Year 2, WestEd conducted four focus groups with ERWC 11 students and four focus groups with comparison English 11 students.

Each focus group included 6–12 students. WestEd researchers used a semi-structured interview protocol consisting of 18 questions in the areas of background, reading, writing, lifelong skills, class comparison, recommendations, and other (see Appendix H). The focus group protocol was revised for Pilot Year 2.

In Pilot Year 1, two focus groups took place in October 2018, followed by one each in February and March 2019. In Pilot Year 2, seven focus groups took place in September 2019, and one focus group took place in February 2020. Due to travel and school access restrictions because of COVID-19, no focus groups took place in the Evaluation Year.



Midyear Surveys

In Pilot Year 2, ERWC and English 11 teachers were asked to complete a midyear survey. Researchers developed separate protocols for ERWC and English 11 teachers, but some of the same questions were included on both so that a comparison could be made between the courses (see Appendix I). The surveys asked teachers to provide information about their curriculum and pedagogical approaches. Surveys were revised for the Evaluation Year to include questions about teachers' approaches to online learning.

In Pilot Year 2, 185 (93%) of 198 ERWC teachers completed the survey, and 84 (93%) of 90 comparison teachers completed the survey. In the Evaluation Year, 141 (100%) of 141 ERWC teachers completed the survey and 54 (83%) of 65 comparison teachers completed the survey.

End-of-Year Surveys

All participating ERWC teachers were asked to complete an end-of-year survey to provide feedback on their experiences during the school year. The survey asked which modules they had taught and in what order they had taught them. It also asked teachers to rate on a 5-point scale the extent to which they felt their students grew academically and to respond to four open-ended questions regarding their views of the curriculum (see Appendix J). A total of 179 (95%) of 189 ERWC teachers completed the end-of-year survey between April 2019 and June 2019 in Pilot Year 1.

In Pilot Year 2 and in the Evaluation Year, WestEd researchers revised the end-of-year survey to include questions about distance learning and writing instruction. A new survey was also developed and administered to English 11 teachers, which contained some of the same questions as the survey for ERWC teachers so that researchers could compare English 11 and ERWC 11 teachers' responses. In Pilot Year 2, 191 (96%) of 198 ERWC teachers and 88 (98%) of 90 comparison teachers completed the end-of-year survey between May 2020 and June 2020. In the Evaluation Year, 140 (99%) of 141 ERWC teachers and 63 (97%) of 65 comparison teachers completed the survey between May 2021 and June 2021.

Student Surveys

A sample of the grades 11 and 12 students who were enrolled in an ERWC course or a comparison course completed surveys in April 2021. The sample was selected by using a random number generator to select four participating teachers from each condition to administer the survey to two sections of their students. Three teachers in each condition (grade 11 ERWC, grade 11 comparison, grade 12 ERWC, and grade 12 comparison) agreed to administer the survey to their students. Researchers emailed teachers the link to the survey, which was developed in Qualtrics, and teachers shared the link with their students.

Students were asked to indicate their level of agreement with statements related to their motivation and engagement in their English courses (see Appendix K). Researchers analyzed results from 251 ERWC students and 268 comparison students.



Methodology for Determining Teachers' Perceptions of Successes and Challenges and for Developing Corresponding Recommendations

Analysis of the open-ended responses from the data collection instruments began with the creation of initial codes based on common themes that emerged from the data. This process involved creating many codes using open and axial coding techniques as described by Strauss (1987). As new themes emerged from research instruments, the evaluation team reached consensus about the definitions of codes and updated them as necessary. The research team coded data based on themes. Data were only coded if the text fit within the definition of a code, and some data were coded with multiple codes.

Following the coding, the research team reviewed the codes and identified themes that emerged from the data. The research examined disconfirming evidence to ensure the themes were robust. The research team then compared the themes across data-collection instruments to triangulate different stakeholders' experiences with the ERWC 3.0. Findings in the following sections of this report are organized by the major themes identified.

For the quantitative survey data, researchers tabulated teachers' responses and, when appropriate, conducted t-tests to determine which responses had statistically significant differences between the ERWC group and the comparison group.

Implementation Evaluation Findings

This section reports the implementation findings from all three years of the ERWC 3.0 evaluation study. For each year, findings on the fidelity to the instructional model, participants' perceptions of successes and challenges, and corresponding recommendations are included. These findings are intended to be used by district and school leaders who make decisions about high school English curriculum adoption. They may also be useful for others who develop professional learning for English teachers and for English teachers who are interested in using the information presented to inform their practice.

Pilot Year 1 Findings

In Pilot Year 1, 54 (29%) of the 189 participating teachers were new to teaching any version of the ERWC, and all teachers were new to teaching specifically the ERWC 3.0. New aspects of the ERWC 3.0 both contributed to successes and presented challenges in Pilot Year 1. A notable success is that teachers viewed some aspects of the ERWC 3.0 as supportive to students. Regardless of a teacher's level of experience with teaching overall or their experience with previous versions of the ERWC, teaching the ERWC 3.0 for the first time was challenging because much of the material and many of the concepts were brand new; teachers had to spend time getting familiar with the curriculum and making decisions about how to adapt it to meet their students' needs. The learning curve may have contributed to the low level of fidelity as well as some challenges identified in Pilot Year 1.



Fidelity to the Instructional Model

Overall, most teachers participated in the professional learning activities with fidelity, but did not implement the curriculum with fidelity (see Tables 5.7 and 5.8). The most commonly reported reason for not teaching the curriculum with fidelity is that teachers did not have enough instructional minutes to teach all of the material (see the "Participants' Perceptions of Successes and Challenges in Pilot Year 1" section for more details).

Overall, most teachers participated in the professional learning activities with fidelity, but did not implement the curriculum with fidelity.

Table 5.7 Completion Percentages for ERWC Teachers' Participation in Professional Learning in Pilot Year 1

Measure of Fidelity	Percentage of Teachers Who Completed with Fidelity
Summer Institute	96%
Coaching Sessions	84%
Community of Practice Meetings	92%



Table 5.8 Percentages of ERWC Teachers Who Taught the Curriculum With Fidelity in Pilot Year 1

Curriculum Taught	Percentage of Teachers
Taught the Required Modules With Fidelity	3%
Taught the Required Modules But Without Fidelity	12%
Did Not Teach the Required Modules	85%

Teacher Participation in the Professional Learning

Summer Institute

Ninety-six percent of previously ERWC-certified teachers and 80 percent of teachers who were not previously ERWC-certified attended the full Summer Institute in Pilot Year 1.

Of the 189 teachers participating in the grant, 134 (71%) were previously certified to teach the ERWC and 54 (29%) were not previously certified. Of the 134 previously ERWC-certified teachers, 129 (96%) attended the Summer Institute for the required three days. Of the 54 teachers who were not previously ERWC-certified, 43 (80%) attended the Summer Institute for the required four days.

Coaching

Eighty-four percent of participating teachers in Pilot Year 1 completed four or more coaching cycles.

ERWC teachers were expected to complete at least five coaching cycles, but teachers were considered to have completed the coaching component with fidelity if they participated in at least four coaching cycles.

Community of Practice Meetings

Ninety-two percent of participating teachers in Pilot Year 1 participated in at least four CoP meetings.

How Much of the Curriculum Was Taught

Three percent of participating teachers in Pilot Year 1 taught at least 10 modules with fidelity.

During Pilot Year 1, a total of 106 teachers piloted the ERWC in grade 11 for the entire school year. Among these, 22 teachers (12%) taught the required number of modules in each module category, according to responses on the end-of-year survey (see Appendix J for survey protocol). Three of these teachers had taught at least 10 of the modules with fidelity based on responses on the module survey (see Appendix D for survey protocol).



In grade 12, a total of 99 teachers piloted the ERWC in Pilot Year 1 for the entire school year. Among these, 33 teachers taught the required number of modules in each category, based on responses to the end-of-year survey (see Appendix J for survey protocol). Based on responses on the module survey (see Appendix D for survey protocol), one teacher had taught at least 10 modules with fidelity, meaning they had taught modules in the required categories and had taught the elements required for fidelity within each module. (See the following section for discussion about why teachers were unable to teach at least 10 modules during Pilot Year 1.)

Participants' Perceptions of Successes and Challenges from Pilot Year 1

This section discusses the successes and challenges identified by participants from Pilot Year 1 and is followed by a section on corresponding recommendations developed by researchers for improving the implementation of the ERWC 3.0 (see Table 5.9).

Table 5.9 Major Successes, Challenges, and Recommendations in Pilot Year 1

Successes	Challenges	Recommendations
The ERWC 3.0 improved the curriculum.	Teachers had mixed perceptions of rigor.	Provide more support for teacher collaboration and planning time.
The ERWC 3.0 promoted a high level of student engagement.	Delay in materials hindered teachers' planning.	Modify the curriculum to emphasize depth over breadth.
The ERWC 3.0 was accessible to diverse students.	Teachers had concerns about the structure of the curriculum.	Support more effective classroom discussions.
The ERWC 3.0 supported student academic growth.	Teachers faced time constraints.	Include greater emphasis on explicit writing instruction.
Coaches perceived teachers as open to coaching.	Activities associated with learning goals were taught least often.	Provide more assessments that are better aligned with state standards.

Notably, level of rigor, meaning the difficulty of the curriculum, is listed here as both a success and a challenge, reflecting disparate responses from teachers. The research team interprets these apparent contradictions as indications that teacher experiences varied across California and Washington, in part due to the diverse backgrounds of students, teachers, schools, and communities.



Successes

The ERWC 3.0 improved the curriculum

The end-of-year survey, which asked teachers who had previously taught the ERWC to describe how the ERWC 3.0 compared to the ERWC 2.0, showed that teachers viewed the updated curriculum favorably. Welcomed changes included the wider variety of topics, the inclusion of more literature, and the incorporation of mini-modules. Individual interviews with teachers supported these findings. The greater array of modules—including, for example, the choice of having students read more full-length works rather than excerpts—allowed teachers more choice and the ability to select modules that they anticipated would appeal to their particular student population. In the end-of-year survey, one teacher commented:

The 3.0 version has modern texts, which is a huge improvement on the 2.0 units. I also like the expansion into full-text choices—my students responded positively to both ["So What's New? Zoot Suit and New Dramatic Potentials" and "The Distance Between Us"]. I like the amount of choice available for the units in 3.0.

Another interviewed teacher echoed appreciation for the increased number of module options for directly addressing students' needs and interests: "You really get to choose what you are passionate about and what you think will reach your particular students."

Not only did teachers favor the variety of topics represented in the modules but they also liked that students had the opportunity to use multiple modalities to show what they learned. As one teacher commented in the end-of-year survey:

Unlike ERWC 1.0 and 2.0, ERWC 3.0 offers more dynamic and creative ways through which students can demonstrate their learning—the activities in 3.0 are tailored so students can use multimedia and various learning modalities. Previous ERWC modules worked from the same template of readings, writings, vocabulary, and activities.

Teachers also commended the addition of more literature in the ERWC. Their students liked the literature, in part because it offered a break from reading the expository articles commonly found throughout the modules. As one interviewed teacher reported, it prompted greater engagement by teachers and students alike:

I've honestly really enjoyed it. I love that it's been amplified from the past. This is my fifth year teaching ERWC. In the past it was mostly expository, and I understand that that's the focus of this curriculum. I really appreciate that there was more literature folded into the different modules. One of the best modules we did this semester was the Othello module, reading drama. Both of my classes of ERWC seniors enjoyed it immensely. To have that literature [woven] in led to really great teaching and really great learning.



Teachers repeatedly cited appreciation for the addition of mini-modules which, they say, break up the larger modules, can be completed in a short period of time, and make the rhetorical strategies more accessible to some students. One teacher referred to the mini-modules as "the best part of ERWC 3.0." Another noted high student engagement because the mini-modules take less time to cover: "The mini ones I love because they're straight to the point. They keep [students] engaged because they're faster. The information cuts straight to the heart of it, going deep while going fast."

Additionally, teachers described the revised curriculum as more current and relevant. They appreciated the addition of recently published articles and other forms of media, such as TED Talks. Teachers believed that students related more to the updated curriculum. As one teacher said in the end-of-year survey, "There are more options, which means I can choose more modules that appeal to students' interests, or that are relevant to what is going on in the world outside of school, making their education more relevant."

The ERWC 3.0 promoted a high level of student engagement

Although engagement varied by module, a high level of student engagement was a common theme across the teacher surveys and interviews. Teachers cited feedback from students, student exchanges with one another in class discussions, and student work as evidence of high engagement.

In interviews and the end-of-year survey, teachers reported that a key to engagement is texts that are relevant to students' lives. Relevance makes students more likely to do the reading and to participate in lively discussions about the assignments. "When you're talking about texts that they actually have an interest in, they start asking better questions, they start writing more, they actually want to know about it," said one teacher. Another spoke of students' high excitement and interest when reading Zoot Suit. "They loved the play! [I] absolutely have not seen eleventh graders more engaged in a reading assignment in years. They all wanted to read out loud, which was surprising to me." Yet another teacher spoke of how strongly students related to the module "The Distance Between Us": "I had 99% of my students reading the book outside of class. They finished it! And they were talking about it in their other classes!"

Student focus groups supported this finding about relevance. In a discussion of favorite modules and what they liked most about the readings, one student stated, "I've read almost all the texts that [my teacher] has given us in class. I find them very interesting." Another reported that the "Juvenile Justice" module was "my favorite of the whole course," particularly because it involved issues of concern to the students' age group. "Since we're all young here, it helped to bring out a new perspective of young people and crime."

Teachers were particularly moved by their experiences teaching modules that their Latinx²¹ students could relate to. The two modules referenced regarding Latinx students were "On Leaving | On Staying Behind" and "So What's New? Zoot Suit and New Dramatic Potentials."

²¹ The term Latinx is a gender-neutral way to refer to people of Latin American descent.



One teacher described the poems in "On Leaving | On Staying Behind" as having a powerful and emotional impact on students, as evidenced by their writing and class discussions:

This has been the most profound teaching experience I have had this year, as most of my students...are the children or grandchildren of immigrants from Mexico, El Salvador, Honduras, etc. Some have had their parents or others deported recently. The poems were especially powerful and insightful and captured the experiences of my students and/or their relatives. It was also powerful for them to write about these experiences in their essays and share them with the classes. There were many tears and great support given. Give us more units like this, and kudos to [the author] Dr. Garcia.

Teachers highlighted activities within the modules that worked particularly well. For example, one teacher, who praised the module "The Things They Carried" for its accessibility to students, especially noted the value of the module's activities, which involved discussing and debating the characters in the book:

The book itself is an excellent choice for our students. It is written at a level that they can handle on their own, and they feel like they can be successful without the teacher having to walk them through every step. They really enjoyed discussing and debating the actions and motivations of the characters.

Another teacher spoke of how much students appreciated lessons that embedded social media platforms. For example, an activity in *Hamlet* instructed students to turn passages from the character Claudius into tweets. Students liked the activity so much, said the teacher, that they wanted to create a class Twitter account so they could send tweets from the different characters.

Teachers noted that the ERWC lends itself to student collaboration and engaging discussions—more so, some felt, than some other English curricula. One teacher mentioned:

The small-group discussions where they're sitting right next to somebody are effective. [I have been] leaving it up to them to organize among themselves, and they have been very willing to read together, talk about the text together, complete activities together. I feel like I have had more success with cooperative learning and group work in this program than in other programs.

Another teacher shared that the "Juvenile Justice" module provided a particular opportunity for collaborative student activities. Using the module, the teacher assigned real juvenile justice cases to students. Students worked on the cases in groups. Two students played the roles of prosecuting attorneys, and two were defense attorneys. The student attorneys presented opening statements, using rhetoric, while the rest of the class tracked the rhetoric, using a note-taking guide. Students got so engaged that they wanted to do a mock trial. At the end of



the unit, they voted on who had the most persuasive rhetoric, then articulated the reasons for their decisions.

The ERWC 3.0 was accessible to diverse students

While many teachers described the ERWC 3.0 as rigorous, they also reported that it was accessible to students. Teachers appreciated that the curriculum included differentiated instruction, and some particularly referenced the usefulness of the embedded ELD scaffolds and supports. In fact, a key takeaway reported by teachers from the Summer Institute was how impressed they were that the program incorporates Universal Design for Learning (UDL) and ELD principles—in other words, that it is designed to be accessible to all students. One teacher said, "UDL seems [like] an awesome way to approach inclusion of all [and] give access to curriculum to all students."

Accessibility is also bolstered by the curriculum's integration of numerous activities designed to build students' skills, teachers reported. More specifically, teachers said the curriculum provides ample opportunities for students to revisit activities they're struggling with so that they can practice and develop mastery. As one teacher put it:

You would think that maybe [students] would completely just struggle because of the rigor, but they don't. I think the fact that some of the activities are repetitive makes the curriculum more attainable. The student who struggles is like, "Okay. I'll do this again because I don't really understand it. I think I need to practice."

The ERWC's real-world relevance also contributes to its accessibility and to student engagement, teachers reported. By building bridges to current events and to things happening in students' lives, the curriculum provides opportunities for students to find personal meaning in their classroom lessons. One teacher shared how deeply an autistic student connected with *The Curious Incident of the Dog in the Night-Time*, a book whose protagonist is autistic. The student opened up and took on a leadership role in the class while the students read this text:

[The student] let us know right away that she'd read the book. It made the class so much more interesting because [students] know that she is autistic. Going into it was like, "Okay, I've got to be careful, I've got to tread lightly, because I don't know how she's going to react." But on the first day, she said, "I just want to let everybody know that Christopher is autistic, and I am autistic, and so I'm going to help read." So she became my helper. It was an incredible class.

Teachers also reported that the ERWC's real-world relevance helps their English Learner (EL) students gain the confidence to speak in class. "They're able to connect it to their lives," said one teacher. "A lot of them are feeling more comfortable analyzing and some students that are EL are now trying to speak up."



The ERWC 3.0 supported student academic growth

Over 80 percent of teachers responding to the end-of-year survey perceived that their students grew academically over the course of the school year.²² A common theme regarding academic growth, in both interviews and the end-of-year survey, was that through the ERWC, students were becoming more aware of how to read and write more effectively. As one teacher put it, students improved because the ERWC helped "demystify" the processes involved:

Overall, my students have taken more ownership of their learning. They've become more thorough, critical readers and more thorough, intentional writers. The emphasis on reading like writers and writing like readers has helped demystify reading and writing for many of them which, in turn, has helped them read and write more confidently and effectively.

Teachers reported that the ERWC gave students the tools to read with varied purposes, allowed them to do so with a critical lens, and encouraged them to question an author's intentions. Those skills as readers influenced how they thought about and approached writing. Students were writing more, teachers said, and the quality of their writing improved over the course of the school year—i.e., they were writing with more clarity, better organization, and more confidence. Evidence of student improvement was nothing short of exciting for many teachers. As one explained in the end-of-year survey:

Just the other day I required [my students] to write the character analysis essay for The Boy Who Harnessed the Wind module and asked them to write it in two class periods—and most of them did it! At the beginning of the year, I would have gotten many half-written (or less) papers when I required them to write an essay in that amount of time.

Another teacher reported that student reflections about their writing provided evidence that they had gained a better understanding of writing rhetorically:

I feel like maybe they are finding themselves more capable. When I was reading their last reflections about what they want to improve on as a writer, I usually would expect them to [say], "Oh, I'm horrible at essays and writing." But now they're more specific. They [say], "I want to get better [at] integrating my quotes." Or, "I want to get better at learning how to use ethos."

Teachers also reported that their students were becoming more fluent in revising and editing processes and more independent with writing assignments—for example, moving beyond the standard five-paragraph essay to writing a research paper for the first time.

²² Disclaimer: Student academic growth is typically expected from one school year to the next. Although the study did not have a comparison group during the pilot year, researchers still collected teacher perspectives regarding student growth and the research team believes that these data are important to share in this report.



Several teachers reported that with the ERWC, students were becoming more skilled in annotating, which enhanced their abilities to both read and write as they interact more deeply with text. One teacher described how students' skills grow as they learn to annotate:

Once we went through all the different steps of annotation—talking about audience and the author's purpose and the rhetorical-ness of it and the setting and why it's all that important—they realize that everything they read is telling them something. They're making all these notes and they're talking about the why. Now that they're digging deeper, they understand [to ask], "Why is this person cursing? How old is she? Why is this a factor? What would happen if we changed the grammar in this story? What is the single story of this? Why is she that way? What kinds of people talk this way?" It makes them think on a higher level.

Focus groups helped to shed light on students' understanding of the ERWC, including what they found engaging and what they were learning. Students discussed learning to read and write better and learning such specifics as how to use ethos, pathos, and logos to make their writing persuasive. They reported that their teachers invited them to have in-depth discussions, which involve "a lot of critical thinking." One student said of the ERWC:

It makes you think about everything. Like, "Okay, well maybe this character is doing this because of this." So it makes you go back and helps you understand the story and what the author is trying to say and why the characters are doing what they're doing.

When asked, "Is there anything else you would like to share regarding your experience with the ERWC?" students in one focus group responded that they wished all their classes throughout high school were like the ERWC. "If I'd had this from freshman year, I'd be more confident," one student said. Others agreed, with one adding, "It allows you to think for yourself, to give your opinion."

The data show that ERWC classrooms indeed provided a plentitude of opportunities for students to participate as speakers and listeners and to collaborate with each other as thought partners. The ERWC is filled with activities that promote both small-group and whole-class discussion, and teachers reported growth in verbal participation among students. Students became increasingly willing and comfortable talking in class, the teachers said, and the ideas that students communicated demonstrated deeper thinking. In the end-of-year survey, one teacher also reported seeing growth in the language students used to communicate verbally, as well as their use of academic conventions for discussion, such as citing sources and evidence:

The biggest growth I saw was in [students'] speaking skills and their ability to use academic language, which is a huge win for me. Specifically, when students share during a discussion, they are now using academic language and automatically giving page numbers and quotes to support their assertions.



Another teacher described initially hesitating to allow small-group discussions, then becoming more comfortable after seeing that allowing students to work collaboratively in groups resulted in greater communication among them and opportunities to learn from each other:

I have to say [small-group discussion] has transformed the way my students learn. I honestly didn't think it would. I thought it would be too distracting. I thought they would chat too much. But I've learned that as long as I give them a little freedom to maybe chit chat while they're doing their work, everybody profits. I think as part of the reason they're doing so well is, they're comparing their conclusions with each other. As they're reading, they're kind of being competitive as to who gets the cleverest idea, or the best point to bring out. That's just a new experience for me. It's great!

Teachers reported that as students move from one module to another and become more skilled with the various ERWC strategies, they grow more confident, turn in more and better work, and exhibit more comfort in sharing their ideas during class discussions. One teacher described the changes:

I have more assignments being turned in. They are better written. I have students raising their hands—normally [I've had to use] non-volunteer cards. They want to participate. They want to be part of the discussion. They want to comment on what their classmates say. They want to be more engaged in class.

Across the board, teachers believed their students became more critical readers and writers—for example, analyzing texts more thoroughly and engaging in more questioning regarding the author's purpose. "My students were able to move from a surface level understanding to higher levels of thinking," said one teacher. Critical thinking is a skill that other teachers cited as essential for college readiness. Another observed that the critical thinking skills promoted through the ERWC aligned with the California standards (the Common Core State Standards²³) and said that student performance would therefore improve on the standardized state test:

There's a lot of critical thinking [required], they have to think on their own—"What do you think about that main idea?" "Why is the author saying these words?" "Why did he make his argument in this structure?" That's what most of our standards are asking for, for them to think on their own.

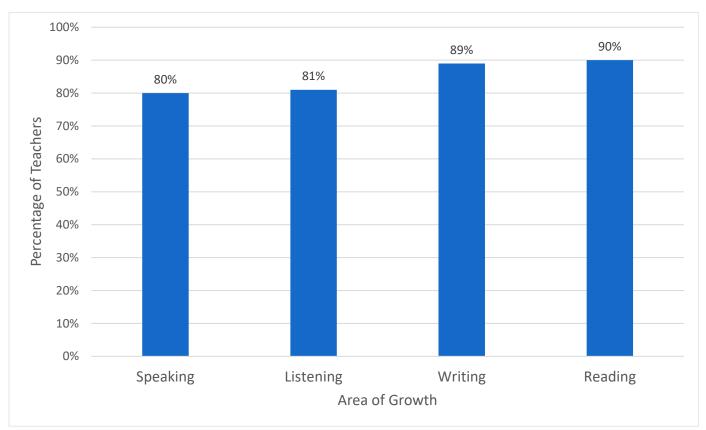
Data from the Pilot Year 1 end-of-year survey (see Appendix J for survey protocol) offers a summary of the levels of student growth teachers perceived as a result of using the ERWC 3.0. Ninety percent of teachers reported the sense that their students grew "moderately" to "a

²³ Both California and Washington use the Common Core State Standards for ELA and mathematics. For more information see https://www.k12.wa.us/student-success/learning-standards-instructional-materials for Washington.



great deal" in reading. Eighty-nine percent reported this level of growth in writing; 81 percent in listening; and 80 percent in speaking (see Figure 5.2).

Figure 5.2 Percentage of Teachers Who Reported Their Students Grew "Moderately," "Considerably," or "A Great Deal" in Speaking, Listening, Writing, and Reading



Number of observations: 179
Source: Pilot Year 1 end-of-year survey

Nearly all teachers surveyed cited at least one example of student growth in response to the question, "Please describe how your students grew academically." Teachers typically coupled reading and writing in their comments regarding student growth and, similarly, coupled speaking skills with listening skills. Data from interviews with teachers and from student focus groups supported these findings.

Teachers noted that seeing positive outcomes for students made the efforts in shifting their pedagogical practice feel worthwhile. Some noted that, like students, teachers appreciated being challenged by the ERWC's rigor. A teacher noted, "I think it does push me as a teacher, but it's been a good struggle. I have seen results."



Coaches perceived teachers as open to coaching

The most reported success by coaches was that teachers were open to coaching. One coach shared, "Both of my teachers are super collaborative and open to discussion. They are hard workers and believe in what we are doing. They have been trained well and are positive despite setbacks in the program itself." Only a few coaches shared that they perceived teachers as reluctant to participate in coaching cycles.

Some coaches shared that teachers were more open after building a relationship and establishing trust. For example, one coach described how building trust allowed for progress to be made: "Overall, our relationships are developing. The one teacher who was most resistant seems more invested in ERWC and more willing to share with me." Also, some coaches attributed shifts in teachers' attitudes to having the issues with accessing the materials resolved. As one coach shared, "Our initial challenges were at the beginning of the school year with the modules not being ready to go. ... But, these last couple cycles have been extremely successful as those problems have worked themselves out, and I have gained the trust of my team." After basic needs were taken care of, coaches were able to have deeper, more meaningful conversations with teachers.

Coaches were optimistic that they would be able to build on the relationships they established during the first year of the grant. As one coach shared, "At the close of my [fourth] observation, I was able to join the teachers for a 'working' lunch. I've really enjoyed developing trusting relationships with them where I feel they are comfortable opening up. We're all looking forward to next year together."

Challenges

Teachers had mixed perceptions of rigor

Although many teachers praised the rigor of the ERWC 3.0, responses in this area were notably mixed. As described previously, a number of teachers credited the curriculum with rigorously promoting critical thinking. Others, however, expressed concern that the types of writing required by the ERWC 3.0 were insufficient for helping students become adept at the types of writing required for the Smarter Balanced ELA/Literacy Summative Assessment, the ELA state test in both California and Washington. Opinions differed on whether the curriculum adequately prepares students for college-level writing.

In the module surveys, interviews, CoP logs, and end-of-year survey, teachers who praised the rigor of the ERWC 3.0 said that it challenged their students to think critically and provided engaging kinds of learning opportunities. Some teachers particularly noted that the prompts embedded in the ERWC's modules encourage students to think critically and question both the texts and the authors' purpose. Yet, a number of teachers worried about sufficient preparation for the state writing assessment, which was a particular concern for some grade 11 teachers in California, where students take the ELA state test at grade 11. (Washington students take it at grade 10.) Moreover, teachers are aware that improving test results is a priority for many



school administrators. One teacher said, "Summary writing is not something that grade 11 students should be focusing on for a novel study. Constructed responses are a better use of time, as they will be writing these for the [state test]." Another teacher stated, "I'm concerned that they only wrote one informative essay. All the rest of them were narratives. They did a lot of short writes."

These teachers were concerned that these same perceived curricular gaps also mean insufficient preparation for college. Other teachers, however, stated the opposite—a strong belief in the curriculum's college readiness value.

Delay in materials hindered teachers' planning

The concern expressed most frequently by teachers in module surveys, interviews, CoP logs, and the end-of-year survey was that the curriculum was incomplete or unavailable during the Summer Institute and into the beginning of Pilot Year 1. During the Summer Institute, teachers had limited information regarding the modules; they had to make decisions about which modules they planned to teach during the upcoming school year without knowing exactly which readings and activities were included in the modules. One teacher described selecting a module that turned out to include a significantly higher volume of reading than expected:

I had a really hard time this summer. I was in the first group of people that went to the training at the end of the school year. We didn't even have the two-page overviews of all of our units, and we had to make decisions on which units we were going to teach based on these two pages. So, for instance, I chose the fake news unit because I thought, "Oh, my gosh, this is vital. This is so important." But [when I saw the whole unit], I didn't think we needed to read 12 articles about deciphering fake news.

Other teachers described selecting modules ahead of time, prepping and planning either individually or with other ERWC teachers, then finding out later in the summer or at the beginning of the school year that a module they had selected would be removed from the curriculum or would not be available in time to teach it in the fall. One teacher described the frustration felt after spending time, outside of the Summer Institute, planning to teach a module and then finding out that it would not be part of the curriculum:

I was going to be doing the Never Fall Down unit, and I spent two weeks of my summer planning. My book is completely highlighted, margined, tabbed—and now I've been told I don't get to teach it. I am so disappointed. I was so excited about Never Fall Down. All of a sudden it just [got] switched.

(The module "Never Fall Down" was removed from the curriculum because the curriculum developers received feedback that the book provided only one perspective on Cambodian history. Since the pilot year, the module developers revised the module with texts by several authors with diverse perspectives and renamed it "Cambodia Remembers.")



The general concern voiced by most teachers was that receiving the materials late and/or receiving incomplete sets of materials gave them insufficient time to thoroughly review the modules and collaborate with others planning to teach those modules. One teacher described it as "kind of like we're flying by the seat of our pants and staying one step ahead and then trying to just make things work."

Coaches also spoke about the teachers' chagrin. One coach shared, "There was high frustration concerning the delay in getting materials, and frustration still exists with not having access to student versions of the materials." (Student versions of the modules have been made available since this coach's comment.)

Teachers had concerns about the structure of the curriculum

In module surveys, interviews, CoP logs, and the end-of-year survey, some teachers who taught previous versions of the ERWC shared that the ERWC 3.0 modules were disjointed by comparison. Specifically, teachers said they noticed that modules in the ERWC 3.0 were written by several different authors. As one teacher noted, that sometimes caused a lack of cohesion across the school year and detracted from a clear focus on skills:

You could tell that they were all created by totally different people. They varied too greatly, and there was not enough focus on skills for students. It was easy to tell what the creator was passionate about. It seemed like the creators were just doing what they liked and not necessarily what was best for students.

Teachers also said that it was difficult to design a cohesive year-long course, given the volume of modules to choose from. Some teachers preferred the ERWC 2.0 because it had fewer modules and thus, they felt, allowed a more cohesive curriculum.

In student focus groups, module surveys, teacher interviews, and the end-of-year survey, students and teachers shared that activities in some modules were repetitive, leading to student disengagement. One student described the repetition as "super unnecessary" and "really boring and tiring." A teacher spoke of understanding the modules' learning goals but agreed with the student that an undue level of repetition is counterproductive:

I think it's great and worthwhile that these modules are attempting to cover so much ground and meet so many important learning goals, but I feel like the engagement level suffers. The kids can only study the same text or set of texts for so long before they burn out on them, and covering all of the "areas" of a module (not even every activity—just getting to all the categories of activity) is a very time-intensive process. It's been a major issue for me.

In module surveys, interviews, CoP logs, and end-of-year surveys, some teachers shared that activities in some modules were not aligned with the culminating tasks. For example, one teacher referenced the module "Three Ways to Persuade" and said that its activities did not ask students to analyze quotes, yet that was the focus of the culminating task. Some teachers



modified the culminating tasks to better align them with the activities and/or learning goals in the module. One teacher who did so explained:

The topics are relevant and interesting to the students and have a lot of potential. However, many of the activities did not align with the assessment in the end. Many of the [culminating assessments] were asking the students to complete tasks that were far reaching and difficult to accomplish if they had limited exposure to the content.

Other teachers decided to give their students either more or less choice based on their goals for the module. One teacher, for example, modified the culminating prompts to have more of a focus on rhetoric:

Some of the final writing prompts didn't work for me. It felt more pertinent to focus on the rhetorical effects of our first-person narrator and the unconventional structure and text features than to dwell on definitions and different types of lies. I modified some prompts to fit the novel's rhetorical choices and eliminated some of the theme-based prompts.

Overall, teachers agreed that they would like students to be able to practice throughout the module the skills needed to successfully complete the culminating task.

Teachers faced time constraints

Consistent with findings from the ERWC 2.0 evaluation (Fong et al., 2015), data from the ERWC 3.0 module surveys, interviews, CoP logs, and the end-of-year survey indicate that the modules took longer to teach than expected. One possible reason was that teachers modified the curriculum to make it accessible for their students. Teachers reported spending a considerable amount of time building students' background knowledge before delving into modules to ensure that students would be able to engage with the subject matter. Referencing "The Great Gatsby" module, one teacher said, "It's hard for kids to read and understand a story about the 1920s when they know very little about it. These units need some background built into them." Another teacher recounted preparing students for the module "From Hip-Hop to Mash-up: Remix Culture and Copyright Law":

Before I began the unit, I did a mini-unit based on the Bruno Mars cultural appropriation controversy. It was a great segue into thinking about what is original, what is influential, and how that relates to music and popularity. This allowed a frame of reference for the students when we began this unit.

This teacher described having to provide background information, which took up additional time, before diving into the module itself.

Other teachers described their need to incorporate a student-friendly voice in the curriculum. One said:



As a teacher, I'm having to go back and put myself in the position of a student, to think through, "What am I being asked to do, or think about?" That's a little frustrating, having to recreate the directions in a student-friendly voice. It's time-consuming, very time-consuming.

This teacher felt that if the curriculum were taught by a first-year teacher or a teacher who was not part of the pilot, students would be at a disadvantage.

Teachers also reported spending extra time teaching a range of writing processes and strategies. "The writing and revising process takes longer than expected," one teacher said, "and I have to take time to explicitly teach collaboration." Another said the units lacked solid writing instruction, "so I explicitly taught theme statements and paragraph structure." Another teacher reported having to teach students about annotated bibliographies, "which was very confusing to do using the activities provided." Additionally, teachers noted that modules often did not scaffold the writing processes and strategies needed to complete the module.

Lastly, teachers shared that they lost instructional time due to schoolwide events and testing, which caused them to feel crunched for time to complete modules.

Activities associated with learning goals were taught least often

Findings from the module surveys indicate that teachers taught activities associated with learning goals least often. Learning goals are statements of what students will know and be able to do as a result of a module. Activities associated with learning goals invite students to create learning goals, monitor their progress toward achieving learning goals, and reflect on their own learning. In interviews and CoP logs, some teachers shared that they were unsure how to approach teaching learning goals or that they had used alternative strategies to foster students' metacognition. For example, one teacher preferred to use an essential question to guide the instruction of the modules. In the following quote, a teacher describes the decision to not incorporate learning goals into teaching the module titled "The Tragedy of Othello, the Moor of Venice" because doing so seemed redundant:

I haven't used [learning goals] because it seems really awkward and didn't feel like my style. For reading Othello, the end product—which has been up on the board—is to analyze the author's theme through his use of characterization. That's the guiding principle.

Another teacher reiterated these sentiments and referred to the learning goals as "not genuine." The teacher suggested that learning goals should either be part of the curriculum itself or part of the classroom culture, rather than a separate task. "It's like 'stop what you're doing midway and think about some goals before you do it."

Other teachers shared that they ran out of time to teach modules, so they skipped activities associated with learning goals because they did not seem essential.



Recommendations from Pilot Year 1

In individual interviews, end-of-year and module surveys, and CoP logs, teachers conveyed changes they might make to improve the ERWC 3.0 or their experiences implementing it. Based on those responses and on the research team's overall analysis of qualitative findings, the following recommendations emerged.

Provide more support for teacher collaboration and planning time

Coaches and teachers alike cited the benefits of teachers having opportunities to plan together and share ideas for implementation, whether in CoP meetings, districtwide gatherings, or at the Summer Institute. Additionally, of the 49 participating schools, 19 (39%) provided teachers with at least one pull-out day to plan collaboratively, extra planning time that coaches and teachers viewed as useful. As one teacher noted in a CoP log:

We talked [about] how effective it was to collaborate with each other. Eleventh grade teachers were especially pleased with the collaboration and being able to design lessons together. It works very well to help and support the students; they see that the classes are set up by teachers working together. We all agreed that this is very beneficial to student learning.

Research supports teachers' sense that professional learning by way of collaborative learning and problem solving may positively contribute to student achievement (Darling-Hammond et al., 2017). Given its value, teachers suggested that more planning time would improve the ERWC 3.0. Specifically, teachers would like more time to discuss and collaborate with other teachers on topics such as scaffolding, modifying modules, grading papers, and calibrating grading. Some called for more CoP meeting time; others wanted to hear from teachers outside their school or district or to participate in a regional meeting of ERWC teachers.

Teachers may benefit from occasional full days of ERWC-focused professional learning in order to plan, which would give teachers the opportunity to address problems of practice and strategically map out their yearlong course plans, and may help address the struggle many teachers reported in finding time to teach all the modules. Teachers could also use this time to observe each other, as seeing aspects of the ERWC 3.0 modeled by others may spark teachers' ideas on how to improve their pedagogical practices.

Modify the curriculum to emphasize depth over breadth

The most common recommendation from teachers on the end-of-year survey was to decrease the required number of modules so that the curriculum can more readily emphasize depth over breadth. Some teachers said that in addition to having too many modules, having too many activities within each module made it hard to go deep. One teacher suggested at least including time estimates for activities within the modules to help teachers plan use of class time:

Knowing the estimated amounts of time to spend on each section could have helped too, even if it just gave me some sense of priority for the activity. For example, the



activities that were essential took multiple days to complete and were sometimes given equal (or less) space than "warm up" type activities.

Student comments supported this finding. In focus groups, students suggested that modules be shorter and more challenging, as illustrated by one student: "Instead of doing 10 easy questions, maybe [complete] three questions that make you think a lot."

ERWC leaders have since reduced the minimum required number of full-length modules from six to five and supported teachers on making decisions about which activities to prioritize. Although some teachers need all the scaffolding built into modules to support their students, others may not. By prioritizing some activities, teachers may be able to better hold students' attention.

Support more effective classroom discussions

Students, teachers, and coaches alike shared that they would like richer discussions among students. Teachers suggested that there be more time built into the modules for classroom discussions. Students shared that they would like more and better orchestrated classroom discussions. As one student commented:

We need to bounce ideas off of each other. If there was more [focus on] group work, and if all students put in the same amount of work and could engage more with each other, then I think the course would be a lot more appealing to students.

Supporting teachers in building a classroom culture in which students feel comfortable and motivated to share with each other is of critical importance. One way to provide such support is by making opportunities for teachers to share knowledge and ideas about what a supportive culture looks like and to share strategies for creating an environment of trust and safety. Additionally, the coaches may appreciate the opportunity to share knowledge and strategies on how to support teachers in facilitating deeper classroom discussions.

Include greater emphasis on explicit writing instruction

Teachers expressed interest in having more specific writing instruction built into the curriculum. Specifically, teachers suggested adding instruction on mechanics, grammar, vocabulary, and the development of introductions and thesis statements. Some suggested building writing instruction into all the modules. Others suggested creating a module focused on teaching essential writing skills. One teacher recommended that the curriculum include at the beginning of the year "a two-to-three week module dedicated to teaching the mechanics of writing." Adding supports for writing instruction may help teachers teach more activities in the Writing Rhetorically section of the arc.

If explicit writing instruction cannot be added to the modules, another possible solution could be to highlight modules that already include explicit writing instruction. Doing so might allow teachers who would like more support on writing instruction to make more informed decisions when selecting modules to teach.



Provide more assessments that are better aligned with state standards

Teachers expressed concerns regarding their ability to effectively assess student learning in the ERWC and concerns about the curriculum's alignment with state standards and high-stakes tests. Their suggestions ranged from including a grading rubric for every module to ensuring more variety in assessments. Teachers said that rubrics help them give feedback in a timely manner. Moreover, students can use rubrics as learning tools. For example, one teacher noted that if the "Ready to Launch" module had a rubric, students could use that rubric to assess writing quality as they draft graduation speeches: "This could generate whole-class discussion and really hammer home strengths and weaknesses of graduation speeches in a nonthreatening way."

One way to incorporate rubrics could be for the curriculum developers to collect and polish rubrics that some of the teachers have already created.

Relatedly, another prevalent suggestion from teachers was for the modules to include samples of student work. Teachers suggested that samples would help both teachers and students have a better understanding of the expected outcomes. Having examples of "top, middle, and low levels," said one teacher, would enable students to better prepare for both formative and summative assessments.

Teachers generally voiced a desire for more formative assessments, summative assessments other than essays, and assessments aligned to state standards. Some teachers reported that the existing grammar practice questions are insufficient for preparing students for the state test. Another teacher noted that because school administrators expect teachers to link objectives and grades based on standards, it would be helpful if all of the activities in the modules were overtly aligned to the standards:

It would be helpful to know where [a] standard is being incorporated in which activity, so that when we go to plan how to approach a unit, and we're doing standards-based grading, we would know which of the standards are supposed to be connected to which activities. That would also make it easier for us to pick and choose which activities would be most effective for hitting the standards that we're trying to hit.

Pilot Year 2 Findings

Most (84%) of the teachers participating in Pilot Year 2 had also participated in Pilot Year 1. Teachers' familiarity with the curriculum allowed them to more fluidly make decisions about which aspects of the ERWC 3.0 supported their students and addressed some of the challenges that had been noted in Pilot Year 1. However, a new source of challenges arose in Pilot Year 2: the COVID-19 pandemic. It caused a major disruption in instruction and presented many challenges to implementing the ERWC 3.0 with fidelity, as detailed in the following sections.



Fidelity to the Instructional Model

As was the case in Pilot Year 1, most teachers in Pilot Year 2 participated in the professional learning activities with fidelity but did not implement the curriculum with fidelity (see Tables 5.10 and 5.11). As in Pilot Year 1, the most common reason for teachers not teaching the curriculum with fidelity in Pilot Year 2 was that they did not have enough instructional minutes to teach all of the material. Given that schools closed down due to the COVID-19 pandemic in March 2020 and either halted ERWC instruction or moved to teaching online, teaching all of the ERWC material was even more challenging in Pilot Year 2. Additionally, it was challenging for teachers to attend the required number of CoP meetings and coaching sessions in the pandemic context.

As was the case in Pilot Year 1, most teachers in Pilot Year 2 participated in the professional learning activities with fidelity but did not implement the curriculum with fidelity.

Table 5.10 Completion Percentages for ERWC Teachers' Participation in Professional Learning in Pilot Year 2

Measure of Fidelity	Percentage of Teachers Who Completed with Fidelity
Summer Institute	99%
Coaching Sessions	84%
Community of Practice Meetings	82%



Table 5.11 Percentages of ERWC Teachers Who Taught the Curriculum With Fidelity in Pilot Year 2

Curriculum Taught	Percentage of Teachers
Taught the Required Modules With Fidelity	0%
Taught the Required Modules But Without Fidelity	17%
Did Not Teach the Required Modules	82%

Teacher Participation in Professional Learning

Summer Institute

Ninety-nine percent of participating teachers in Pilot Year 2 fulfilled the requirement of attending a Summer Institute or making up the work.

Of the 198 teachers participating in the grant, 34 (17%) were new to the grant, and 164 (83%) participated in the grant the previous school year. Almost all of the teachers—197 (99%) of 198—fulfilled the requirement of attending a Summer Institute or making up the work.

Coaching

Eighty-four percent of participating teachers in Pilot Year 2 completed four or more coaching cycles.

ERWC teachers were expected to complete at least five coaching cycles, but teachers were considered to have completed the coaching component with fidelity if they participated in at least four coaching cycles. Of Pilot Year 2's 198 participating teachers, 167 (84%) successfully completed four or more coaching cycles.²⁴

Community of Practice Meetings

Eighty-two percent of participating teachers in Pilot Year 2 attended four or more CoP meetings.

As in Pilot Year 1, teachers were expected to attend five CoP meetings over the course of the school year in Pilot Year 2; however, teachers were considered to have completed the CoP meeting component with fidelity if they attended at least four CoP meetings. In Pilot Year 2, 162 (82%) of 198 teachers attended four or more CoP meetings.

How Much of the Curriculum Teachers Taught

No teachers in either grade 11 or grade 12 taught the required combination of modules and elements needed to teach the ERWC with fidelity.

²⁴ Some coaches were not able to complete all of the required coaching sessions due to school closures.



During Pilot Year 2, a total of 93 teachers piloted the ERWC in grade 11. Based on end-of-year survey responses (see Appendix J for survey protocol), 11 (12%) of these teachers taught the required number of modules in each module category. Based on the module surveys (see Appendix D for survey protocol), no teacher taught the required modules and at least one element in each category needed to teach the ERWC with fidelity.

In grade 12, a total of 129 teachers piloted the ERWC in Pilot Year 2. Among these, 27 teachers taught the required number of modules in each category, according to end-of-year survey responses. Based on module surveys, no teacher taught the required modules and at least one element in each category needed to teach the ERWC with fidelity. (See the following section for discussion about why teachers were unable to teach at least 10 modules during Pilot Year 2.)

Participants' Perceptions of Successes and Challenges in Pilot Year 2

This section discusses the successes and challenges identified by participants from Pilot Year 2 and the subsequent section provides corresponding recommendations developed by researchers for improving the implementation of the ERWC 3.0 (see Table 5.12).

Table 5.12 Major Successes, Challenges, and Recommendations in Pilot Year 2

Successes	Challenges	Recommendations
Teachers were more prepared to teach the ERWC 3.0 in Pilot Year 2 than in Pilot Year 1.	Many teachers were unable to teach the required number of modules.	Invite teachers to reflect on their views of learning goals.
The ERWC promoted a high level of student engagement.	Teachers tended to omit activities in the Writing Rhetorically section of the arc.	Invite teachers to reflect on their beliefs about students' abilities to read and write.
The ERWC prepares students to be successful.	Many students did not complete reading or homework outside of class.	Add student samples and rubrics to each module.
Students engaged in classroom discussions.	Activities associated with learning goals were taught least often.	Provide guidance for teachers on how to teach the ERWC in an online setting.
Teachers found the professional learning components supportive.	The transition to online learning disrupted instruction.	Provide guidance for coaches on how to coach in an online setting.



Successes

Teachers were more prepared to teach the ERWC 3.0 in Pilot Year 2 than in Pilot Year 1

All of the ERWC teachers who were interviewed shared that implementation and pacing of the curriculum improved in Pilot Year 2. This is especially notable because researchers did not ask teachers to compare their experiences in Pilot Year 1 and Pilot Year 2; teachers shared that information unprompted. The reason teachers cited most often was that they were more comfortable with the curriculum after teaching it for a year. As one teacher shared, "This year I think things are going much better than last year because [teachers who taught it last year are] acclimated to the curriculum." Teachers had become more familiar with the texts, had a better idea of how long activities would take, could anticipate when their students may struggle, and knew when and how to make modifications based on what would work for their teaching styles and their students. One teacher shared:

I find myself moving through the modules quicker because I know what takes more time versus other things. And so the pacing has changed. I know I can do three activities a day, usually not just two. I know which ones didn't work last year. ... I'd say the pacing is going faster.

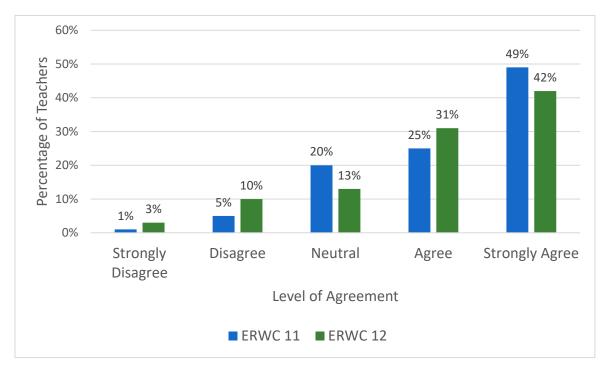
Teachers added that their familiarity with the curriculum had allowed them to be more intentional about their implementation of the curriculum, as illustrated by one teacher:

[Implementation of the ERWC is] going a lot better than last year. I think last year I was getting my feet wet a little bit. We're trying to transition from my own curriculum to this curriculum, but it's going a lot better. Now that I'm more familiar with it, I'm able to implement and...apple pick what I can, what is most effective for my students, what's going to be most beneficial for my students. My implementation is, I would say, more purposeful this year as opposed to last year.

On the Pilot Year 2 midyear survey (see Appendix I for survey protocol), most teachers indicated that they would like to continue to teach the ERWC in the future. Seventy-four percent of ERWC 11 teachers and 73 percent of ERWC 12 teachers agreed or strongly agreed that they would like to continue teaching the ERWC after the conclusion of the grant (see Figure 5.3).



Figure 5.3 Extent to Which Grades 11 and 12 ERWC Teachers Indicated That They Would Like to Teach the ERWC After the Conclusion of the Grant



Note. Figure 5.3. displays survey responses from a total of 181 ERWC teachers (84 grade 11 and 97 grade 12). A two-sample t-test with equal variance was performed after converting the Likert scale into a continuous numeric scale (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree). The test indicated no significant difference in the mean response for ERWC teachers based on their grade.

Two-sample t-test with equal variance, Pr = .299, t = 1.043, degrees of freedom = 179

Source: Pilot Year 2 midyear survey

Teachers who neither agreed nor disagreed may have wanted to teach some of the ERWC modules but not the entire curriculum. Teachers frequently shared this sentiment informally during classroom observations.

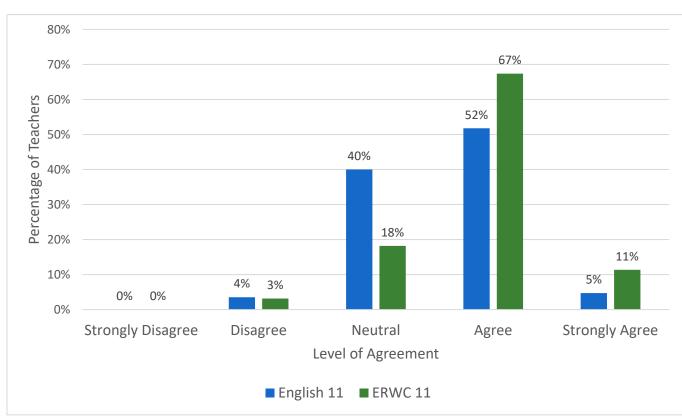
Coaches noted a difference in teachers' approach to implementing the ERWC. For example, teachers had been evaluating students' progress and reteaching when necessary and modifying activities to support students' success on the culminating tasks—which had happened less frequently in the previous school year. As one coach noted, "Teachers have demonstrated a level of comfort and trust in the 3.0 curriculum due to their experiences last year. The small adaptations they're making to the activities are reflective of the particular needs of their individual classes." Teachers' increased comfort-level with the modules also allowed them to manage pacing more effectively, according to coaches. Teachers and coaches both shared that it is advantageous for coaches to be familiar with the modules because that familiarity enables them to help plan out how to teach modules and suggest specific modifications.



The ERWC promoted a high level of student engagement

On the Pilot Year 2 midyear survey (see Appendix I for survey protocol) before school closures, teachers reported that their students were engaged in the ERWC modules, as was the case in Pilot Year 1. There is some evidence that the ERWC may be more engaging than the comparison English 11 curriculum for a variety of reasons. On the end-of-year survey, the grade 11 ERWC and the English 11 comparison teachers were asked to indicate their level of agreement with the following statement: "Students were engaged in the curriculum." Seventy-eight percent of ERWC teachers agreed or strongly agreed that their students were engaged in the curriculum, and 57 percent of regular English 11 teachers agreed or strongly agreed that their students were engaged in the curriculum (see Figure 5.4). A t-test was performed and indicated that results were statistically significant.





Note. Figure 5.4 displays survey responses from a total of 173 teachers (88 ERWC 11 and 85 English 11 comparison). A two-sample t-test with equal variance was performed after converting the Likert scale into a continuous numeric scale (1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree). The test indicated that there is a significant difference in the agreement level for ERWC and comparison teachers in grade 11.

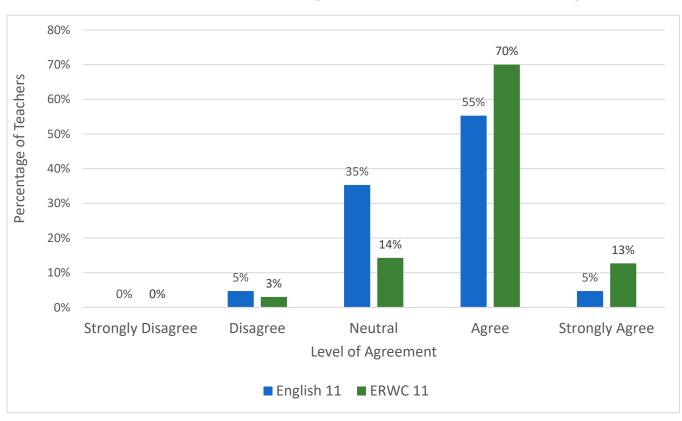
Two-sample t-test with equal variance, Pr = .004, t = -2.928, degrees of freedom = 171

Source: Pilot Year 2 end-of-year survey



This variation may be a result of students' interest in the readings. On the Pilot Year 2 end-of-year survey (see Appendix J for survey protocol), the grade 11 ERWC teachers and the English 11 comparison teachers were asked to indicate their level of agreement with the following statement: "Students found the readings in the curriculum to be interesting." Eighty-three percent of ERWC teachers agreed or strongly agreed that their students found the readings in the curriculum to be interesting; 60 percent of English 11 comparison teachers agreed or strongly agreed that their students found the readings in the curriculum to be interesting (see Figure 5.5). A t-test was performed and indicated that results were statistically significant.

Figure 5.5 Extent to Which English 11 Comparison Teachers and ERWC 11 Teachers Indicated Their Students Found the Readings in the Curriculum to Be Interesting



Note. Figure 5.5 displays survey responses from a total of 173 teachers (88 ERWC 11 and 85 English 11 comparison). A two-sample t-test with equal variance was performed after converting the Likert scale into a continuous numeric scale (1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree). The test indicated that there is a significant difference in the agreement level for ERWC and comparison teachers in grade 11.

Two-sample t-test with equal variance, Pr = .001, t = -3.274, degrees of freedom = 171

Source: Pilot Year 2 end-of-year survey

Feedback from teachers on specific modules provided some insight on what made them so engaging for students. Evidence suggests that modules were most engaging when they had topics that students could relate to, choices about how to demonstrate their learning, and nontraditional texts.



In the Pilot Year 2 module surveys (see Appendix D for survey protocol), teachers were asked to indicate how engaging each module was by using a five-point scale which ranged from "not at all engaging" to "extremely engaging." The modules "On Leaving | On Staying Behind," "The Distance Between Us," and "So What's New? Zoot Suit and New Dramatic Potentials" all contain texts written by Latinx authors and highlight issues that Latinx students may be able to relate to. Qualitative data from teacher interviews support the notion that students related to texts with Latinx themes. Teachers mentioned that the texts provided students with opportunities to share about their families' experiences.

Teachers also reported that students were most engaged in modules when the students had opportunities to exercise their agency and choice. Most commonly, teachers noticed that students relished the opportunity to select their own topic to write about. One teacher provided the following example of how students were able to select their topic within the social media field:

The ability to write about a problem that they saw with social media, I feel, was very engaging to them. Because they had autonomy for the topic of the writing assignment, I think they were more invested in it. Additionally, having them think about social media makes the writing task relevant to their lives outside of school.

One of the ERWC's key principles is "A student-centered approach that emphasizes student agency and metacognition." Findings indicate that there is evidence of the principle coming to fruition in the classroom.

Additionally, students may be drawn to the variety of types of texts included in the curriculum. One teacher described how the variety of mediums supported engagement:

With The Danger and Power of a Single Story, they watch the TED Talk, they look at the pictures of the prisoners.... It's not something that they're used to doing [in] classes. Then when we get to March, and I tell them they're going to read a graphic novel.... It's very interesting to them. It's a new thing for them. They really enjoy the novelty of it. Then we get to The Things They Carried. Again, it's more modern. It's got more edgy language. I think the kids have been really engaged because it's been a variety of fiction and nonfiction with a lot of different platforms that it's being taught on.

Another possible explanation for modules being engaging for students is that teachers were more comfortable with the modules after teaching them in the previous school year, and they may have gained trust in the modules and the capacity to deliver the material in ways that are more engaging. In CoP meetings, teachers discussed strategies to increase student engagement, such as shifting teacher pedagogy to be more inquiry-based and substituting some material in the modules with material they thought may be more engaging for students. One teacher described a modification made for the "Juvenile Justice" module: "[W]e added a



video from YouTube that we felt was a bit more engaging for the kids than the one that's recommended, and it worked very well!"

On the contrary, some comparison course teachers expressed concerns about their curriculum because they thought their students could not relate as well to the topics. As one comparison course teacher put it:

I feel... [students] need to look between the lines of anything that they're reading and understanding [that] making argumentative essays is really important. I feel like if there's no connection and I don't particularly like the material then it's hard for me to teach well. I really like ERWC actually, just because the topics tend to be... they relate to them a whole lot more.

Regarding the curriculum adopted by their district, another teacher bluntly shared, "I hate it.... I just don't like it because I feel like it's too juvenile for 11th grade.... The kids hate it. They absolutely hate it because they feel like they're being talked down to."

The ERWC prepares students to be successful

Some evidence from the Pilot Year 2 implementation data analysis indicates that the ERWC prepares students for the Smarter Balanced ELA/Literacy Summative Assessment and for college and career. Teachers shared that the ERWC challenges students to think critically and communicate across audiences. Comparing the ERWC to regular English classes, one teacher shared:

I think that the ERWC [is] more aligned with what they're expected to do on the [Smarter Balanced ELA/Literacy Summative Assessment]. They're expected to analyze a text deeply and then write about it on the [Smarter Balanced ELA/Literacy Summative Assessment]. I believe that they have some writing responses where they have to defend their answer. They have to cite evidence from the text. That's what we do in FRWC.

Beyond teaching the ERWC and administering assessments aligned with the Smarter Balanced ELA/Literacy Summative Assessment, which are typically mandated by the district, most ERWC teachers who were interviewed were not planning to do additional preparation for the assessment.

In interviews, some teachers shared that students at their schools will most likely begin their careers right after high school, and the ERWC will serve them on that path. One teacher shared her beliefs about how students need to be able to understand others' perspectives:

On the career path, I think it does help them.... [There are] a lot of life-based units. [The Fake News module] helps them start to think about the stuff that they're reading on a daily basis. You might not always read the news, but you're going to have to read and understand peoples' perspectives. Even an email from a coworker.

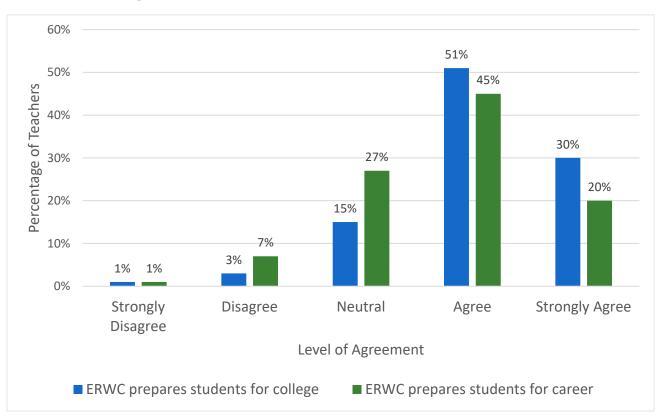


Everyone has coded language in there. I think you're going to have to be able to understand.

As another teacher put it, the ERWC focuses on "life-based skills."

The notion that the ERWC will prepare students for their careers is supported by Pilot Year 2 midyear survey data (see Appendix I for survey protocol). Additionally, teachers reported that the ERWC prepares students for college. Over 80 percent of ERWC teachers agreed or strongly agreed that the ERWC prepares students for college, and 65 percent of teachers agreed or strongly agreed that the ERWC prepares students for their future careers (Figure 5.6).

Figure 5.6 Percentage of ERWC Teachers' Level of Agreement That the ERWC Prepares Students for College and Careers



Number of observations: 182 Source: Pilot Year 2 midyear survey

Some teachers shared in interviews that they had assigned more argumentative writing than prescribed in the ERWC because they believe that is the skill that students needed to build in order to be prepared for college.

Teachers and coaches also reported that students gained skills necessary to be independent thinkers and communicators. One area of growth was writing. Regarding the "Introducing the Rhetorical Situation" module, one teacher shared, "Students were authentic and sensitive to



their audience, and had a strong command of language, strong voice, and humor." Regarding the "Pathos as Inquiry" module, a teacher shared, "By the end, kids were able to write effectively about analysis of an audience and use strategies effectively to address that audience." Another teacher shared how the teacher was able to release control to the students by giving them sentence frames for delivering feedback to peers and then gradually removing those frames.

According to the ERWC's theoretical foundations, instead of teaching toward a "right" answer or prescribing fixed rules and formulas for students to follow, an inquiry-based approach supports students in becoming flexible, adaptive, and reflective thinkers and communicators.

Students engaged in classroom discussions

The Theoretical Foundations for Reading and Writing Rhetorically (Katz et al., 2020) emphasizes the importance of providing students with opportunities to engage in meaningful discussions:

ERWC's emphasis on classroom conversation gives students repeated openings to reflect metacognitively on their unique internal processes; as they consider their own thinking processes and externalize them through conversation, their internal practices become available for discussion and accessible for modification. Effective ERWC classrooms thus prepare students to participate more fully in university-level academic work, workplace collaborations, and civic activities by inviting students to share their thinking, make choices about which direction to go, and agentively advance their own learning.

In alignment with the theoretical foundations, ERWC teachers viewed classroom discussions as valuable. While discussions were enriching for all students, teachers noted that students who may need additional support especially benefited from them. One teacher shared how the ERWC made conversations more accessible to some students:

The ERWC is making higher-level conversations more accessible to the student. It's giving them the tools to have the language and the strategies and the ideas to engage, so it's giving them the scaffolding they need to have the intellectual type conversations.

These discussions were often about topics relevant to students and allowed students to form and share their opinions, as one teacher shared:

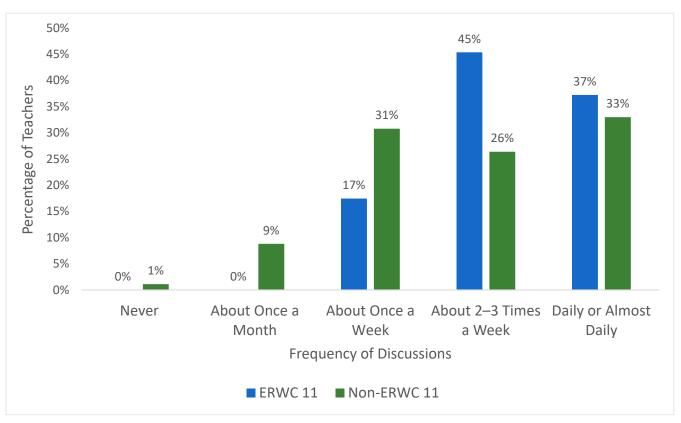
Students had an opportunity to formulate their own opinions on the topic and support it with research. I also added a class debate prior to the culminating task, which seemed successful in having students listen to the opinions of their peers, as well as develop their own ideas.

Not only did ERWC teachers believe students' engagement in classroom discussions advances their learning, but the ERWC teachers also provided students with more opportunities to engage in discussions than did teachers teaching the English 11 comparison course. Figure 5.7



displays the frequency with which the comparison English 11 teachers and the grade 11 ERWC teachers reported on the Pilot Year 2 midyear survey (see Appendix I for survey protocol) that they had provided opportunities for students to discuss texts in pairs or in small groups.

Figure 5.7 Frequency With Which Grade 11 Comparison Teachers and ERWC Teachers Reported Providing Opportunities for Students to Discuss Texts in Pairs or Small Groups



Note. Figure 5.7 displays survey responses from a total of 177 teachers (86 ERWC 11 and 91 English 11 comparison). A two-sample t-test with unequal variance using a welch correction was performed after converting the Likert scale into a continuous numeric scale (1 = Never, 2 = About once a month, 3 = About once a week, 4 = About 2–3 times a week, 5 = Daily or almost daily). The test indicated that there is a significant difference in the frequency of discussions for ERWC and comparison teachers in grade 11.

Two-sample t-test with equal variance, Pr = .004, t = -2.892, degrees of freedom = 162.537 Source: Pilot Year 2 midyear survey

As displayed in Figure 5.7, 82 percent of ERWC teachers reported providing opportunities for students to discuss texts in pairs or in small groups at least 2–3 times per week; 59 percent of regular English 11 teachers reported doing so. This finding is particularly notable because a recommendation from Pilot Year 1 of the study was to support teachers in engaging students in more effective classroom discussions.

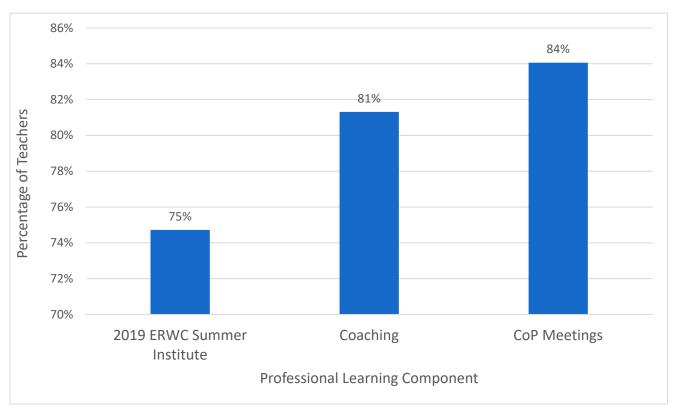
Teachers found the professional learning components supportive

On the Pilot Year 2 midyear survey, teachers were asked to indicate the extent to which they agreed that the three components of professional learning—the Summer Institute, CoP



meetings, and coaching sessions—supported their implementation of the ERWC 3.0. Teachers had the most agreement that the CoP meetings provided the most support for their ERWC 3.0 implementation (see Figure 5.8).

Figure 5.8 Percentage of Teachers Who Agreed or Strongly Agreed That Components of Professional Learning Had Supported Their Implementation of the ERWC 3.0



Number of observations: 183
Source: Pilot Year 2 end-of-year survey

Over the course of Pilot Year 2, the conversations that took place in CoP meetings deepened. At the beginning of Pilot Year 2, teachers mostly discussed which activities to teach and skip and how to ensure that the modules met their students' needs and that their delivery was engaging for students. Teachers also used the time to discuss how to teach the "Introducing ERWC 11/12: Portfolios and Metacognition" modules. Beginning in Pilot Year 2, teachers were required to teach the portfolio modules at the beginning and the end of the school year. Although most teachers opted to teach the portfolios in Pilot Year 1, some had not. Therefore, some teachers were unsure how to approach teaching the modules. Teachers decided whether to have students create paper or online portfolios, what would be included in portfolios, and how to carry portfolios over from grade 11 to grade 12. Some teachers shared that they wanted to be more intentional about having their students set learning goals during this school year.



Teachers shared that the portfolio modules went more smoothly in Pilot Year 2 compared to Pilot Year 1, which may have been supported by the planning that took place in CoP meetings. As shared in one CoP log, "The portfolio component is coming together much smoother than last year for [two teachers]. The students have a better understanding of the portfolios and its goals compared to last year. We give students a checklist regularly which helps them to stay organized." Teachers also reported that modifications they had made had increased student engagement.

In addition to planning out how to teach modules, teachers also used the CoP meeting time to norm grading at the beginning of the year. Some teachers adopted a shared rubric in order to do so.

After Pilot Year 2 was underway, the conversations focused on how to improve students' writing, particularly on the pedagogical approach for teaching specific strategies such as annotation, paraphrasing, and utilizing rhetoric in writing. There was also a heavy focus on ensuring that students were doing enough writing to prepare them for the Smarter Balanced ELA/Literacy Summative Assessment. In order to monitor students' progress, teachers used the CoP meetings to collaboratively review student work and score it using a common rubric.

Some teachers commented that the writing products were stronger in Pilot Year 2 compared to Pilot Year 1. As one teacher shared, "We spent a lot of time calibrating and discussing our Juvenile Justice op-eds. We noticed that students' thesis statements are quite strong, and we think the synthesis graphic organizer helped students to build upon their ideas within the essay." Another teacher shared, "ERWC 11 has phenomenal writing activities with 'The Things They Carried,' and the students' performance has increased from last year to this year because of the instruction."

Given the school closures in March 2020, the conversations that took place in the CoP meetings shifted to how to modify modules to be compatible in an online format at the end of Pilot Year 2. Some teachers decided to switch out modules that they had originally selected and instead use others that are more conducive to online learning. Teachers made texts available through learning management systems. Teachers also discussed the challenge of engaging students in online learning. According to many teachers, their districts had implemented policies that did not hold students accountable for participating in online learning, which led to low student engagement.

As the study progressed, teachers viewed the support provided by their coaches more favorably. Quantitative data suggests teachers viewed their coaches as increasingly supportive throughout Pilot Year 2. Whereas 81 percent of teachers reported on the midyear survey that their coach supported their implementation of the ERWC, 92 percent of teachers reported on the end-of-year survey that their coach supported their implementation of the ERWC.

All ERWC teachers who were interviewed reported that their coaching sessions were useful. Specifically, teachers reported that they appreciated the opportunity to plan out how to teach modules with their coaches. Other teachers shared that their coaches inspired them to improve their practice, and they were able to incorporate their coaches' feedback. As one teacher



illustrated, "I loved having [my coach] in the class.... She did give me some good feedback last year and really helped." Another teacher shared: "Having [my coach] here... [makes me want] to raise my level. It [makes me want] to do the best job I can. It makes me want to improve. We always have good talks afterwards.... [T]he meeting afterwards is probably the best part of it."

Teachers especially appreciated when their coaches were willing to support them as issues came up, such as when technology was not working properly, and were willing to interact with students. After school closures, some coaches were able to support their teachers with transitioning to an online learning platform. One coach shared the support offered to a teacher as follows:

We discussed how online teaching was going, including turn-in rates, what kinds of assignments were garnering the highest response rates, how to adapt assignments, how to work with partners to divvy up workload, how to create Google Meets, how to use Google Meets to record lessons, how to use topics to organize work for students, how the current unit was progressing, and how to adapt the final writing task to be more relevant.

Teachers' improved perceptions of their coaches may have been a result of the relationships their coaches built with them over the span of two years. Coaches shared that, as a result of the trusting relationships that had been established, teachers were more honest and open, which allowed teachers to have deeper conversations. As one coach shared, "The pre-observation conversations went better this year having a year under our belt. [The teachers] had more goals this year than they've had in the past.... I was really seeing us moving more to a partnership." In their coaching logs and reflections, coaches noted teachers' dedication and desire to grow. Some coaches noted how teachers had integrated their suggestions. As one coach shared, "I was excited to see that [the teacher] had incorporated some of the suggestions from our previous sessions into her classes. She and I had some back and forth a few months ago with regard to the need for student collaboration, and it was clear she had adjusted a little bit during today's lesson."

In addition to their making small instructional shifts, some coaches noted teachers' growth across two years. One coach shared that a teacher's approach had transformed from the beginning of Pilot Year 1 to the end of Pilot Year 2:

During the first year, [the teacher] said she had a hard time letting go and trusting the ERWC curriculum. I remember her not being very confident with her teaching during this first year of coaching. She was not confident, and she wasn't always sure what to do from day to day. Her lack of confidence and refusal to let go of things was due in part with having never taught ERWC before last year and then finding herself in a study while being coached and observed. She said she has always trusted me, and we had a great working relationship. During the second year, she began to trust the ERWC curriculum more. She figured out what works and doesn't work with her students; she has the confidence to tweak an activity, assignment, or



lesson. She especially loves the collaborative component of the curriculum. The kids are doing more work than they ever have. That was one of the things she noticed between teaching 11th grade English and teaching the 11th grade ERWC curriculum was that students have to do more of the heavy lifting for their learning. They write more, collaborate more, and participate more.

This shift is aligned with the ERWC's theoretical foundations, as the teacher shifted pedagogical practice to be more student-centered and the students exhibited an increased ability to engage independently.

Overall, teachers viewed the 2019 ERWC Summer Institute as a success. Teachers appreciated having time to develop their yearlong courses and collaborate with their colleagues. One teacher exclaimed, "It is possible to plan a whole year the summer before you teach!!! Thank goodness for ERWC!" Specifically, teachers emphasized that the Summer Institute supported them in backwards planning, ensuring modules connect to one another, and pairing minimodules with full-length modules.

Teachers enjoyed collaborating with and learning from other teachers. While collaborating, teachers found it useful to discuss how activities could be modified to meet their students' needs. Teachers felt empowered to make decisions about which activities to teach, supplement, and/or skip. As one teacher stated, "We are encouraged to modify modules to meet the needs of our students." Teachers shared that having the authority to skip activities would allow them to improve their pacing. Teachers communicated a feeling of being part of a movement larger than what takes place in their classrooms.

Additionally, collaboration appears to have built comradery. Specifically, it allowed teachers to understand that the successes and challenges they experienced while piloting the ERWC 3.0 in Pilot Year 1 were similar to those of other teachers. Teachers were able to collaboratively reflect on what they learned in Pilot Year 1 and implement changes in Pilot Year 2. Teachers frequently commented that they felt like they were "in it together." As one teacher stated, "We're all in this together and we got this. What a great community of education professionals."

After schools closed to in-person learning as a result of the COVID-19 pandemic, the ERWC Steering Committee organized a series of webinars intended to guide teachers on how to teach the ERWC in an online setting and provide teachers with resources. Although these webinars were not part of the planned intervention, both the teachers and the coaches found the webinars tremendously helpful. As one teacher shared, "I've got to commend those folks involved in the webinars that provide information about online instruction and strategies to promote it." One of the webinars was facilitated by the author of the "Ready to Launch" module, where the culminating task invites every student to write their own graduation speech. As a result of the webinar, many teachers decided to teach the "Ready to Launch" module instead of the modules they had originally planned in hopes of providing students with some closure to the school year and perhaps their high school experience.



Challenges

Many teachers were unable to teach the required number of modules

Despite teachers' improved pacing, teaching the required number of modules with fidelity was still a challenge. When asked why they were not able to cover the required number of modules, teachers shared that it took longer to teach modules in an online setting. Some districts put policies in place that limited the amount of time teachers could hold class. Additionally, policies that only allowed students' grades to remain the same or improve during distance learning prevented students from participating; some teachers did not proceed with teaching the modules given the low participation. In some districts, teachers were not allowed to introduce new material to students while facilitating learning online. Therefore, teachers were not allowed to teach additional modules after school closures. Other teachers were permitted to teach new material, but they opted not to teach ERWC modules. Instead, they assigned journal prompts or spent time attending to students' socio-emotional needs.

Although the transition to online learning contributed to the issue of not teaching all of the required modules, teachers had reported that pacing had been a challenge even prior to school closures. As one teacher shared in a CoP log:

One common theme was pacing the modules. The teachers agreed that it is easier the second time around, though still challenging.... The teachers agreed that module plans (like those included in some of the 3.0 modules) would be helpful for all modules.

Pacing was especially a concern among teachers serving students who needed additional support. According to those teachers, their students needed more background knowledge to be engaged in topics and texts, and more scaffolding and reteaching to be successful on the culminating tasks.

Although pacing was a challenge for ERWC teachers in both pilot years, comparison course teachers also reported it being a challenge. One teacher described this challenge as follows:

I always have ambitions to get through more than we do and plan to get through more than we do, but then [I adjust] for the kids. Sometimes they don't have the skills that I would expect them to have or they need more help in certain situations than I would have taught initially; things slowed down a little bit.

Teachers tended to omit activities in the Writing Rhetorically section of the arc

When asked why teachers may not be teaching writing activities as much as reading activities, teachers gave several possible explanations but the most common was that teachers may not be comfortable with teaching the ERWC writing activities—for a variety of reasons. First, teachers shared that they may not be as comfortable teaching writing as they are teaching reading. As one explained, "Not every teacher is as comfortable working on writing for an extended amount of time." Other teachers shared how teachers may prefer to teach writing their own way, as illustrated by one teacher:



I think every teacher has their own way of writing. We're all writers ourselves....

Some people like to write the body paragraphs first, and some people like to outline and some people don't. Teachers tend to teach how to write in the way that they personally prefer to write, so I'm sure that choosing those activities is difficult because it's like, "That's not the way I do it so I'm not going to do it."

Another teacher described being willing to try out the activities in the Reading Rhetorically section of the arc but unwilling to teach the activities in the Writing Rhetorically section because the teacher already had a system in place for teaching writing:

[Reading expository compositions and newspaper articles] was all new.... I just had faith in [the curriculum], and the faith worked out because it all went well. But when it came to writing essays and doing peer evaluation and revising them, that's something I've been doing almost 20 years, so I had my system in place for that. Not to say there's anything wrong with [the ERWC] system, it's just I know it was something where I felt really comfortable with that.

Moreover, teachers shared that writing is challenging for students, which may lead to the students being less engaged in the writing process. Trying to engage students in writing can be cumbersome for teachers, so they may skip the writing activities. One teacher shared that it takes time and effort "to keep students focused on producing their own writing within a class and having everybody find success." Some teachers may not spend as much time writing as they would like because they spend extensive time on the reading, as illustrated by one teacher:

Writing, as you know, takes a lot. If they're having a hard time reading, writing is like maybe one step above that. It's hard for them to write. They're not used to writing either. Then time for feedback.... It takes a lot of time to do that. You're trying to do that for every student and my opinion is because we get hung up in the reading. Maybe we do more of the activities [than] we really have to do. We just start to get pushed for time and then we try to play catch up with the writing.

Many students did not complete reading or homework outside of class

Teachers reported on the Pilot Year 2 midyear survey (see Appendix I for survey protocol) that students would not complete reading or homework outside of class, which caused teachers to take longer than expected to complete activities in the Reading Rhetorically section of the arc. Many teachers reported rarely assigning reading or homework to be completed outside of class. Nearly half (45%) of teachers reported assigning reading to be completed outside of class "Never" or "About once a month," and nearly one third (32%) reported that they tended to assign other homework outside of class "Never" or "About once a month." Only 4 percent of teachers reported that they tended to assign reading and other homework "Daily or almost daily." Figure 5.9 displays the frequency with which ERWC teachers tended to assign reading to be completed outside of class.



Daily or Almost

Daily

45% 42% 40% 35% 33% Percentage of Teachers 30% 28% 25% 22% 22% 20% 18% 17% 15% 10% 10% 4% 4% 5%

About Once a

Week

■ Other Homework

About 2–3 Times

a Week

Figure 5.9 Frequency With Which ERWC Teachers Tended to Assign Reading and Other Homework to Be Completed Outside of Class

Number of observations: 184 Source: Pilot Year 2 midyear survey

Never

0%

Students confirmed what teachers indicated about homework frequency. In focus groups, students shared that they were assigned little reading and homework outside of class. The following description by a student is representative of what happened in many English classes:

About Once a

Month

Reading

We are reading The Crucible, and [we complete] 90% [of the work] in class.... We're listening to the audio, or [we] have the option to read it out loud. So we'll just read [The Crucible] in class and then answer as much as [we] can. And if you don't finish [the work] in class you have to take it home to finish.

Of the teachers who were asked why they tended not to assign reading or homework to be completed outside of class, 44 (71%) out of 62 reported that students would not complete assigned work. This situation presents a challenge because students who do not complete the homework cannot then do subsequent assignments in class, as described by one teacher:

I want everybody to be on the same page. I know if I assign a reading assignment, a significant amount of kids won't do it. Then... students who did it will be able to use that information and carry on through the next day's activities and lecture..., but



there'll be a large [number] of kids who aren't [able to complete the next task].... If someone can figure out an answer on how to get kids to do homework or read at home, I would love to hear it. That's one of the biggest issues that I think every high school teacher on earth is facing now with all the distractions.

Other common reasons teachers gave for not assigning homework to be completed outside of class include the belief that homework is unnecessary given how much time students spend in class, the belief that work is too difficult for students to complete without the teacher's guidance, and the understanding that students have other priorities outside of school.

Of the teachers who were asked what some of the reasons may be for students not completing homework, 75 (40%) of 186 teachers reported students did not complete homework because they had other priorities such as taking care of siblings, working, and participating in extracurricular activities. Seventy (37%) of 186 reported students were not motivated to complete work outside of class. Thirty-four (18%) of 186 cited a reason having to do with organization: Students either forgot or did not manage their time well enough to complete assigned work. Twenty-eight (15%) of 186 suggested that the students and/or families did not value school and therefore did not prioritize completing homework.

Of the teachers who were asked to share how they successfully got students to complete homework, 96 (83%) of 115 teachers reported that accountability motivated students to complete homework. Specifically, students tended to complete assigned work if they knew it would be graded, if there would be a quiz, or if they would be expected to discuss it in class. Thirty-five (30%) of 115 suggested that scaffolding assignments or making assignments manageable for students led to a higher rate of completion. And lastly, 17 (15%) of 115 teachers reported that students tended to complete homework if the content was engaging.

Activities associated with learning goals were taught least often

As was the case in Pilot Year 1, activities associated with learning goals were taught least often in Pilot Year 2. It was challenging for teachers to guide students to set meaningful learning goals, as illustrated by one teacher:

It is difficult for students to set realistic, even far-reaching, goals for modules at the beginning of the unit because they write what they think we want to hear (e.g., read more analytically, understand the language, write better). They don't have enough knowledge of and/or experience with the subject matter to create thoughtful goals.

This sentiment was shared by many teachers. When teachers skipped those activities, it was usually because they were pressed for time and viewed those activities as less essential than some of the others.

Some ERWC teachers shared that they were intentional about trying to teach activities associated with learning goals. Some teachers who successfully led students to set and reflect on learning goals did so by giving students feedback that could be used to set goals and by



allowing students to set goals based on rubrics for culminating tasks. Some teachers reported showing students options for the culminating task at the beginning of modules so that students could think about their final products throughout the module.

When ERWC students were asked about learning goals in focus groups, they seemed to be aware of learning goals and had some vague goals in place. When asked to articulate their learning goals, students often shared that they wanted to make their writing sound better. Students shared that they knew they were making progress toward their goals based on teachers' feedback on their writing, as illustrated by one student: "Or if your writing skills or your essay, [or] whatever it is, is getting better over time and you notice it too. The teacher will tell you." When asked about their understanding of the term "learning goals," students from the comparison course were less aware of its meaning and purpose. Although there is room for growth regarding students' abilities to construct and track progress toward meaningful learning goals, ERWC students had a better understanding of what learning goals are as compared to students enrolled in the regular English 11 course, based on the student focus group data.

The transition to online learning disrupted instruction

Teachers unequivocally reported that engaging students was the most challenging aspect of distance learning. Most teachers reported that the grading policies that districts adopted in light of distance learning, which prevented students from receiving grades lower than they had earned before school closures, caused students to opt-out of online learning because they were not held accountable for completing any work. Another reason teachers cited for student disengagement was that students had to support their families by working or taking care of siblings instead of engaging in online learning. A few teachers also shared that technology issues prevented students from logging in online. Teachers noted that the lack of student engagement was especially frustrating when they spent significant amounts of time converting lessons to be conducive to online learning.

Several teachers also commented that their district implemented policies that made it challenging to facilitate online instruction effectively. One such policy was that teachers could deliver instruction or expect work to be completed for only a certain amount of time per week. For example, one teacher described how teachers and students had been meeting in person five days per week, but instruction had then been reduced to one hour on one day per week during distance learning. Another policy put in place by districts that hindered teachers' abilities to teach online was that teachers could not introduce any new instruction; they could only review material. This policy hindered teachers' ability to foster student growth. Additionally, some districts prohibited synchronous learning because they wanted to ensure access to instruction was equitable; some students did not have technology necessary for synchronous instruction. Without synchronous instruction, teachers were not able to maintain relationships necessary to engage students in online learning, check for understanding, or give timely feedback. Some districts prohibited the use of Zoom, which necessitated teachers to use other platforms such as Google Meet or Microsoft Teams. Teachers were less familiar with these platforms, which made facilitating synchronous instruction more difficult.



Some teachers indicated that another barrier for online learning was that students were not ready to learn independently. First, students did not manage their time effectively. For instance, many teachers described how some students were staying up all night and sleeping during the day, causing them to miss classes. Other students missed classes because they did not have a quiet place at home for attending via online videoconferencing. Additionally, teachers suggested that students did not have structures in place to manage their workload. These conditions were particularly challenging when students had to manage several different platforms for their classes. When students were engaged, it was difficult for some to understand written instructions, as one teacher indicated:

While we were somewhat able to keep up with modifications and fidelity during the school year, students were struggling with extensive written directions on assignments. They need lots of support, which I ended up giving 1:1 tutoring for many of them over the phone or Zoom. It was very difficult!

When class is held in person, the teacher can check to ensure students understand the instructions and clarify if needed. Such checking in is not as possible during asynchronous instruction. Additionally, students who usually rely on peers for support with reading were left to struggle with texts individually. Teachers were not able to ensure students understood what they were reading.

Recommendations from Pilot Year 2

Invite teachers to reflect on their views of learning goals

One of the reasons that teachers tend to skip activities associated with learning goals is that they do not see them as valuable for students. This issue could be addressed in the ERWC professional learning by focusing on getting teachers invested in learning goals. Sharing some research on metacognition and modeling how learning goals can be implemented effectively within a module are possible ways to support teacher buy-in.

Invite teachers to reflect on their beliefs about students' abilities to read and write

Some teachers have developed the belief that reading and writing are too difficult for students to complete independently and without support. As a result, some teachers do not assign reading to be done independently and instead have students complete all reading in class. Others skip activities in the Writing Rhetorically section of the arc because they do not believe their students can successfully complete these activities. As one teacher shared, "I have low writers..., and sometimes the [Gathering and Responding to Feedback] activity gives them more anxiety." Many teachers reported providing students with scaffolding, such as outlines and graphic organizers, for students to use to write essays. In the ERWC community, this approach has been referred to as "over scaffolding."

It may be beneficial to invite teachers to reflect on their beliefs about what students can do. Then, provide support for teachers to shift their mindsets to an assets-based approach and



identify ways that students can leverage their strengths to complete the work. When teachers build trust in their students, they can begin to release control and remove unnecessary scaffolding. Some teachers and coaches suggested providing teachers with samples of college-level work. Seeing what students should be able to do in college may spur teachers to raise their expectations for what students should be able to do in high school.

Add student samples and rubrics to each module

When teachers commented on how modules could be improved, the most common recommendation was to include student samples and rubrics. Doing so may support teachers' expectations for the quality of culminating tasks. Also, some teachers have never taught some of the genres introduced in the culminating tasks. Having samples and rubrics available may help teachers better understand how to teach specific genres that they may not have previously been familiar with.

Provide guidance for teachers on how to teach the ERWC in an online setting

Given the challenges teachers faced when transitioning to online learning, they may need some support on how to best teach ERWC modules in an online setting. Teaching online is especially challenging for teachers who have not previously used technology in the classroom. Specifically, teachers may need support on how to facilitate student-to-student interactions online, given that such interactions are a pivotal aspect of the ERWC. Some platforms teachers have used include message boards and NoRedInk. A coach recommended using Screencastify, which is a screen video recorder available for Google Chrome. Another coach recommended that teachers have access to sample lessons showing ways to teach popular ERWC modules online.

Provide guidance for coaches on how to coach in an online setting

The original suggested approach to coaching was for coaches to plan out how the module would be taught, observe a lesson, and hold a reflection conversation with each teacher they coach. When schools were closed, that approach was no longer viable. Some suggested activities included visiting virtual classrooms, reviewing student work, and planning out lessons virtually. While some coaches transitioned to coaching online seamlessly, others reported they felt their coaching was less effective. Coaches indicated that they would like more structured support on how to continue coaching online, as requested by one coach: "I would like more structured guidance on how to hold coaching sessions [remotely]." The coach concluded by suggesting that they be provided with suggestions on what to discuss in the online meetings.

Evaluation Year Findings

In the Evaluation Year, all participating teachers had piloted the ERWC 3.0 for either one or two years. Teachers' increased familiarity with curriculum allowed them to teach modules more confidently. However, teachers continued to face challenges due to the COVID-19 pandemic. Four schools (9% of the total number of participating schools in the Evaluation Year) began the school year using a hybrid model, where some learning took place online and some learning



took place in person. The remaining 42 schools (91%) began the school year completely online. Teachers adapted to teaching online at different paces; some were immediately comfortable converting assignments to be compatible with an online learning platform, and others took more time to adjust. While they navigated online learning, teachers simultaneously discovered which ERWC activities could be successfully taught online. Some activities, teachers found, were extremely successful when taught in person but did not have the same effect when taught online. The context in which teachers taught in the Evaluation Year is important to note when interpreting the fidelity of implementation findings.

Fidelity to the Instructional Model

As was the case in Pilot Year 1 and Pilot Year 2, most teachers in the Evaluation Year participated in the professional learning activities with fidelity but did not implement the curriculum with fidelity (see Tables 5.13 and 5.14). As in Pilot Years 1 and 2, teachers shared that they did not have enough instructional minutes to cover all of the material. Additionally, most teachers taught online for part or most of the school year; according to teachers, teaching material online took longer than teaching in person. Interestingly, a higher percentage of teachers completed the professional learning with fidelity in the Evaluation Year as compared to previous years of the study. One possible explanation could be that these activities took place online, which made them more convenient to attend.

As was the case in Pilot Year 1 and Pilot Year 2, most teachers in the Evaluation Year participated in the professional learning activities with fidelity but did not implement the curriculum with fidelity.

Table 5.13 Completion Percentages for ERWC Teachers' Participation in Professional Learning in the Evaluation Year

Measure of Fidelity	Percentage of Teachers Who Completed with Fidelity
Summer Institute	99%
Coaching Sessions	93%
Community of Practice Meetings	97%



Table 5.14 Percentages of ERWC Teachers Who Taught the Curriculum With Fidelity in the Evaluation Year

Curriculum Taught	Percentage of Teachers
Taught the Required Modules With Fidelity	0%
Taught the Required Modules But Without Fidelity	31%
Did Not Teach the Required Modules	69%

Teacher Participation in the Professional Learning

Summer Institute

Ninety-nine percent of teachers attended a Summer Institute.

Of the 141 returning teachers, 139 (99%) attended a Summer Institute. The number of participants in each cohort ranged from 28 to 50.

Coaching

Ninety-three percent of teachers completed four or more coaching cycles.

ERWC teachers were expected to complete at least five coaching cycles, but teachers were considered to have completed the coaching component with fidelity if they participated in at least four coaching cycles. Of the 141 teachers participating in the Evaluation Year, 131 (93%) successfully completed four or more coaching cycles.

Community of Practice Meetings

Ninety-seven percent of teachers attended four or more CoP meetings.

The expectation from the CSU was that teachers would attend at least five CoP meetings during the school year, but teachers were considered to have fulfilled the CoP component with fidelity if they attended at least four of the meetings. Of the 141 participating ERWC teachers, 137 (97%) attended at least four CoP meetings during the Evaluation Year.²⁵

Three teachers who did not attend at least four CoP meetings were the only ERWC teachers at their schools. Teachers who were the only ERWC teachers at their schools were able to attend CoP meetings with colleagues from their school who teach other classes or with colleagues from other schools who teach the ERWC, but their CoP meetings were sometimes hard to coordinate.



How Much of the Curriculum Teachers Taught

No teacher taught the full ERWC curriculum with fidelity during the Evaluation Year. According to the module surveys (see Appendix D for survey protocol), no teachers taught the required number of modules and at least one activity in each of the six domains.

Based on teachers' responses to the end-of-year survey (see Appendix J for survey protocol), 11 (39%) of the 28 teachers in grade 11 and 34 (29%) of the 118 teachers in grade 12 taught or planned on teaching²⁶ the required number of modules to teach the ERWC with fidelity; however, module survey data indicate that they did not teach at least one activity in each of the six domains in the modules they taught. (See the "Participants' Perceptions of Successes and Challenges in the Evaluation Year" section for discussion about why teachers were unable to teach at least 10 modules during the Evaluation Year.)

Figure 5.10 displays the percentage of teachers who reported teaching a given element in the Assignment Template in Pilot Year 1, Pilot Year 2, and the Evaluation Year.

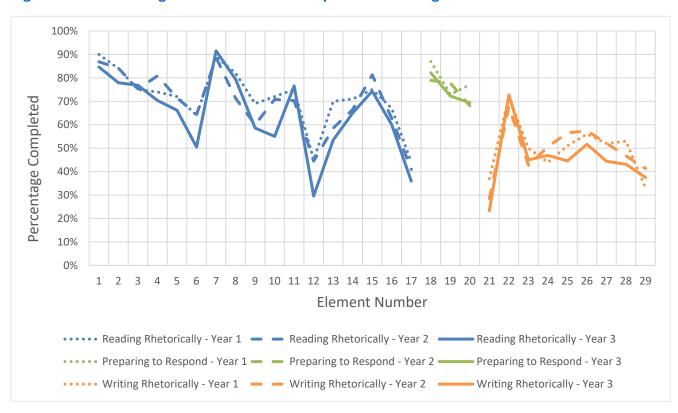


Figure 5.10 Percentage of Teachers Who Reported Teaching Each Element

Number of observations: Pilot Year 1: 1,023; Pilot Year 2: 1,342; Evaluation Year: 1,109 Source: Pilot Year 1, Pilot Year 2, and Evaluation Year module surveys

²⁶ Teachers took the end-of-year survey before the conclusion of the school year, so they reported which modules they still planned to teach.



Tables 5.15, 5.16, and 5.17 display the percentage of teachers who taught each element in each year of the evaluation.

Table 5.15 Percentage of Teachers Who Taught Each Reading Rhetorically Element in Each Year of the Evaluation

Element	Pilot Year 1	Pilot Year 2	Evaluation Year
1. Getting Ready to Read	90%	87%	85%
2. Exploring Key Concepts	84%	84%	78%
3. Surveying the Text	75%	75%	77%
4. Making Predictions and Asking Questions	74%	81%	70%
5. Understanding Key Vocabulary	72%	71%	66%
6. Creating Personal Learning Goals	64%	64%	51%
7. Reading for Understanding	89%	89%	92%
8. Annotating and Questioning the Text	82%	71%	79%
9. Negotiating Meaning	69%	60%	59%
10. Examining the Structure of the Text	72%	71%	55%
11. Considering the Rhetorical Situation	75%	70%	77%
12. Analyzing Rhetorical Grammar	45%	45%	30%
13. Analyzing Stylistic Choices	70%	59%	53%
14. Summarizing and Responding	71%	67%	65%
15. Thinking Critically	75%	81%	74%
16. Synthesizing Multiple Perspectives	67%	63%	60%
17. Reflecting on Your Reading Process	44%	41%	36%

Number of observations: Pilot Year 1: 1,023; Pilot Year 2: 1,342; Evaluation Year: 1,109 Source: Pilot Year 1, Pilot Year 2, and Evaluation Year module surveys



Table 5.16 Percentage of Teachers Who Taught Each Preparing to Respond Element in Each Year of the Evaluation

Element	Pilot Year 1	Pilot Year 2	Evaluation Year
18. Considering Your Task and Your Rhetorical Situation	87%	79%	82%
19. Gathering Relevant Ideas and Materials	73%	78%	72%
20. Developing a Position	77%	68%	69%

Number of observations: Pilot Year 1: 1,023; Pilot Year 2: 1,342; Evaluation Year: 1,109

Source: Pilot Year 1, Pilot Year 2, and Evaluation Year module surveys

Table 5.17 Percentage of Teachers Who Taught Each Writing Rhetorically Element in Each Year of the Evaluation

Element	Pilot Year 1	Pilot Year 2	Evaluation Year
21. Making Choices About Learning Goals	37%	29%	23%
22. Making Choices as You Write	72%	68%	73%
23. Negotiating Voices	50%	43%	45%
24. Analyzing Your Draft Rhetorically	44%	51%	47%
25. Gathering and Responding to Feedback	51%	57%	45%
26. Editing Your Draft	56%	57%	52%
27. Preparing Your Draft for Publication	52%	52%	44%
28. Reflecting on Your Writing Process	53%	47%	43%
29. Reflecting on Your Learning Goals	33%	41%	38%

Number of observations: Pilot Year 1: 1,023; Pilot Year 2: 1,342; Evaluation Year: 1,109

Source: Pilot Year 1, Pilot Year 2, and Evaluation Year module surveys



As depicted in the tables above, teachers taught almost every element less often in the Evaluation Year as compared to Pilot Year 1 and Pilot Year 2. One possible explanation for this change may be that teachers were not able to teach as much material while learning took place online, causing them to have to teach fewer activities.

With regard to how often teachers completed each of the elements within the Assignment Template, the elements that were taught by the highest percentage of teachers on average across all years, respectively, were number 7 "Reading for Understanding," number 1 "Getting Ready to Read," number 18 "Considering Your Task and Your Rhetorical Situation," number 2 "Exploring Key Concepts," and number 8 "Annotating and Questioning the Text."

Two of these elements—"Getting Ready to Read" and "Exploring Key Concepts"—are within the "Preparing to Read" domain of the Assignment Template, where students complete activities to activate prior knowledge and frontload material before reading the text. As discovered in the first pilot year, this emphasis on preparing may be because teachers see these activities as essential for building student interest and engagement in the module. These elements may lead students to complete more of the module's tasks, engage in richer, more thoughtful discussions, and possibly transfer their learning to other areas of their lives.

Two of the most frequently taught elements—"Reading for Understanding" and "Annotating and Questioning the Text"—are within the "Reading Purposefully" domain of the arc. Qualitative survey and interview data suggested that these elements may be taught more frequently than others because teachers believe students need to understand the text before they can contribute meaningfully to discussions or be able to write about the text.

On average across all years of the evaluation, the two elements taught by the lowest percentages of teachers are related to metacognition: number 21 "Making Choices About Learning Goals" and number 29 "Reflecting on Your Learning Goals." Some possible explanations are that teachers had limited instructional minutes and prioritized teaching other elements, and that teachers did not find these elements worthwhile because students did not set authentic learning goals. (See the "Participants' Perceptions of Successes and Challenges" section in Pilot Year 2 for more detailed information about why teachers tended to skip activities associated with learning goals.)

Participants' Perceptions of Successes and Challenges in the Evaluation Year

This section discusses the successes and challenges identified by participants in the Evaluation Year, and the subsequent section provides corresponding recommendations developed by researchers for improving the implementation of the ERWC 3.0 (see Table 5.18).



Table 5.18 Major Successes, Challenges, and Recommendations in the Evaluation Year

Successes	Challenges	Recommendations
Participating in the grant contributed to teachers' professional growth.	Teachers found fostering and sustaining student engagement to be difficult during online learning.	Encourage teachers to trust themselves as educators.
The relevancy of the texts and topics is the ERWC's biggest strength.	Teachers were unable to complete the suggested number of modules.	Consider organizing a peer-to- peer coaching model for ERWC teachers.
The ERWC promotes grade 11 students' motivation.	Teachers would like texts to include more fiction, more diverse perspectives, and more current topics.	Develop ways to keep the modules updated.
The structure of the curriculum is supportive for students.	Teachers had low morale while teaching during the pandemic.	Develop ways to support teachers to teach writing.
ERWC teachers viewed the curriculum more favorably in the third year of the study.	Results from the study in the 2020/21 school year do not reflect teachers' and students' abilities.	Continue to investigate why the grade 11 ERWC is viewed more favorably than the grade 12 ERWC.

Successes

Participating in the grant contributed to teachers' professional growth

ERWC teachers reported that their participation in the grant contributed to their professional growth. One ERWC teacher explained as follows:

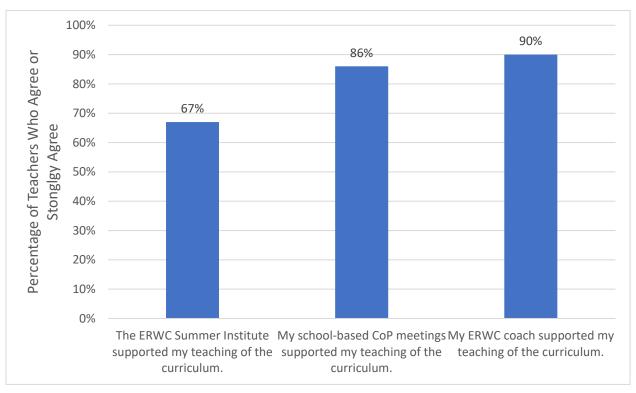
[Participating in the i3 grant] has made me a much, much better teacher because it has forced me to reflect on my practices. The collaboration that has gone into our implementation of the curriculum has also made me a more confident educator. I'm incredibly grateful for the opportunities for growth offered to me by being an ERWC i3 participant.

ERWC teachers reported that the coaching aspect of the grant was particularly useful. On the Evaluation Year midyear survey (see Figure 5.11; and for the survey protocol, see Appendix I), responding to items regarding the professional learning offered through the grant, 90 percent of ERWC teachers reported that they agreed or strongly agreed that their coach had supported their implementation of the curriculum, 86 percent of ERWC teachers reported that they agreed or strongly agreed that their school-based CoP meetings had supported their



implementation of the curriculum, and 67 percent of ERWC teachers reported that the ERWC Summer Institute had supported their implementation of the curriculum.

Figure 5.11 Percentage of ERWC Teachers Who Agreed or Strongly Agreed That Each Aspect of Professional Learning Supported Their Implementation of the Curriculum



Number of observations: 141

Source: Evaluation Year (2020/21 school year) midyear survey

In the interviews and surveys, ERWC teachers shared that their coaches had helped them be more reflective and increase the level of rigor of their course.

When asked which aspect of the i3 Validation grant was most valuable, most teachers reported that the opportunity to collaborate was most valuable. Some teachers explained how the grant allowed them to have more time to collaborate than normal at Summer Institutes, in CoP meetings, and during pull-out days funded through the grant. According to teachers, collaboration time was primarily used to plan out how to teach modules, as illustrated by one teacher:

The amount of collaboration that my English 12 team did over the past three years was amazing. We were able to decide which modules to do, plan out how to deliver them, which activities would best meet our students' needs, and then implement our plans. We often had to, as usual, adapt and revamp plans, but we had good conversations, lots of help from our coach.



As a result of this collaboration, some teachers' relationships with their peers grew stronger, resulting in a more cohesive team. As one teacher described: "I enjoyed the collaboration with my PLC and coach the most. It felt comforting to have other teachers at my site going through the same material at roughly the same time. This added to the cohesiveness of our school."

Additionally, teachers commented that collaborating with teachers from other schools was valuable. One teacher in particular described the impact of collaborating with other teachers as follows: "The chance to meet and collaborate with professionals from outside of my school has been invaluable! Not only has this greatly helped my professional growth and confidence as a teacher, but my morale as well in this incredibly challenging (and rewarding) career."

Participating in the grant made some teachers feel like they were part of a larger movement, inspiring them to continuously fine-tune their pedagogical approaches.

The relevancy of the texts and topics is the ERWC's biggest strength

Teachers commonly cited the ERWC's relevant texts and topics as the curriculum's biggest strength. One teacher described their experience with the curriculum as follows:

I've been super impressed with the ERWC. I've been at this... for 14 years, so I've been through a few curricula. It's the one I've been the most impressed with. It seems to be the most engaging curriculum I've used in my career. In terms of improving it, I don't really think it can be improved upon too much, except maybe continuing to stay relevant with the module topics.

According to teachers, the relevancy of the texts and topics is essential for fostering student engagement. This perspective was corroborated by students who shared that they are most motivated to complete reading and homework when the content is engaging. As one student put it, "Whenever the topic we're discussing in English classes is interesting, that makes me more engaged.... I want to explain myself and my point of view on the subject." Students shared that they were especially engaged when they had opportunities to hear their peers' perspectives on those controversial issues. As one student put it, "When I am interested in a topic, especially one that has multiple views on it, I love writing about it because I feel like what I write can't be right or wrong, which gives me more confidence."

Teachers viewed some modules as more engaging than others. On a survey after teaching each module, teachers indicated how engaging the module was for students, selecting from the following choices: "Not engaging," "Somewhat engaging," "Moderately engaging," "Very engaging," and "Extremely engaging." In order to quantify results, each choice was assigned a number ranging from 1 to 5, with 1 aligning with "Not engaging" and 5 aligning with "Extremely engaging." Then, the average number for each module was calculated.

In grade 12, the modules that were reported as most engaging were all of the issue modules. Those modules include the following (with the module with the highest level of engagement at the top and the module with the fifth highest level of engagement at the bottom):



- Juvenile Justice (3.83)
- Language, Gender, and Culture (3.79)
- On Leaving | On Staying Behind (3.71)
- Politics of Food (3.67)
- The Daily Me (3.67)

In grade 11, modules that were reported as most engaging were from a variety of categories and include the following:

- So What's New? Zoot Suit and New Dramatic Potentials (3.88)
- The Things They Carried and the Power of Story (3.88)
- *The Crucible* (3.78)
- The Distance Between Us (3.75)
- Daily Challenge: Mental Illness in Our Lives (3.73)

Regardless of the module type, the modules reported as most engaging for students in both grades include those with topics that students can relate to, such as issues around mental health and immigration.

The ERWC promotes grade 11 students' motivation

ERWC teachers reported that the ERWC fueled students to find their authentic voices. According to ERWC teachers, students will be able to communicate effectively after high school in different settings because students built the confidence to communicate based on their audiences. Specifically, teachers mentioned that the ERWC is scaffolded in a way that builds students' confidence and fosters their motivation to improve. As one teacher commented, "I like that it helps the student to find their voice, to develop research skills to expand their knowledge base on a given topic and to develop an opinion—a stance on that topic."

ERWC 11 courses boosted students' motivation more than the comparison English 11 courses, according to teachers on the Evaluation Year midyear and end-of-year surveys (see Appendices I and J for survey protocols) and students on the Evaluation Year student survey (see Appendix K for survey protocol). Survey responses were categorized into a 5-point Likert scale (Strongly disagree = 1; Disagree = 2; Neutral = 3; Agree = 4; and Strongly agree = 5). Researchers calculated the average score for each group on the various survey questions and then ran independent t-tests to determine which results were statistically significant. (See Table 5.19 for the results from the teacher surveys; see Table 5.20 for the results from the student surveys.)



Table 5.19 Extent to Which Teachers Agree With Statements About Student Motivation

Statements	ERWC Teachers (n = 28)	Comparison English Teachers (n = 34)	Difference
[On Midyear Survey:] Students find the writing topics in this curriculum to be interesting.	3.89	3.27	0.63
[On Midyear Survey:] Students work hard in this class because they are interested in the topics.	3.50	3.00	0.50
[On Midyear Survey:] Students are exploring their positions relative to each topic.	3.96	3.62	0.35
[On End-of-Year Survey:] Students find the readings in this curriculum to be interesting.	4.18	3.71	0.47
[On End-of-Year Survey:] The curriculum that I use is a strong curriculum.	4.43	3.56	0.87
[On End-of-Year Survey:] I enjoy teaching the curriculum.	4.50	3.94	0.56
[On End-of-Year Survey:] The curriculum that I use prepares students for college.	4.46	4.00	0.46
[On End-of-Year Survey:] The curriculum that I use prepares students for their future careers.	4.50	3.74	0.77

Note. A two-sample t-test was used to calculate significance level for statements listed in this table. In the event of unequal variance between the sample sizes, a Welch correction was used. Sample size: Teachers who taught grade 11 and grade 12 were analyzed with teachers who taught grade 11 only for ERWC and comparison English.

Source: Evaluation Year midyear and end-of-year teacher surveys



For all statements on the teacher surveys (see Table 5.19), the average response from ERWC teachers was higher than the average response from comparison English teachers, and the results were statistically significant at the 5-percent level.

Table 5.20 Extent to Which Students Agree With Statements About Student Motivation and Engagement

Statements	ERWC Students (n = 142)	Comparison Students (n = 129)	Difference
I have become more motivated to complete reading and writing assignments in my English class this year compared to last year.	3.99	3.64	0.35
I want to understand the texts I am reading.	4.33	4.09	0.24
The successes I have had with writing in my English class have contributed to the growth of my confidence as a writer.	3.99	3.71	0.28
When I come across a difficult task, I try my best to complete it.	4.42	4.21	0.21
I am generally interested in the texts and topics covered in my English class.	3.79	3.37	0.42

Note. A two-sample t-test was used to calculate significance level for statements listed in this table. In the event of unequal variance between the sample sizes, a Welch correction was used.

Source: Evaluation Year student survey

For all questions on the student survey (see Table 5.20), the average response from students enrolled in ERWC courses was higher than the average response from students enrolled in comparison English courses, and results were statistically significant at the 5-percent level.

The structure of the curriculum is supportive for students

When asked in the Evaluation Year end-of-year survey to describe the strengths of the ERWC 3.0, teachers commonly identified the structure of the modules as a strength. As one teacher shared, "The ERWC process is good, beginning with preparing to read, analyzing a text, developing a position and writing." Teachers specifically commented on how activities build on one another to take students through the arc in a way that is both rigorous and scaffolded. This progression sets up students to be successful on the culminating task, as explained by one teacher: "Modules are [intentionally] designed and allow students plenty of opportunity to develop skills and understanding to be successful on final outcomes."



Another reason why teachers liked the structure of the ERWC is its flexibility. As one teacher shared:

I really love this curriculum. It gives me just enough structure and just enough space for my own creativity. I also like that there are fewer texts, but the texts we use are full texts. I like that everything ends with writing. They are exhausted by this at first...and then they just learn to expect it.

Teachers shared that one of the major improvements of ERWC 3.0 is that it includes universal design for learning (UDL) and "integrated" and "designated" ELD.²⁷ These additions provided some much-needed scaffolding, according to teachers. One teacher explained appreciating the additions as follows:

The strengths of the ERWC 3.0 include engaging, interactive, diverse, and universal learning that is accessible to students with different learning strengths and needs.... The routine of the arc (we are even starting to show other departments/grade levels how to use it to plan). The ability to adapt for EL students.

ERWC teachers viewed the curriculum more favorably in the third year of the study

Compared to Pilot Year 1 of the study, ERWC teachers viewed the curriculum much more favorably in the Evaluation Year, according to the end-of-year surveys across years (see Figure 5.12; and for survey protocol, see Appendix J). One possible explanation for this positive change is that teachers had become more comfortable implementing the curriculum after teaching it for one or two years.

²⁷ As noted earlier, designated ELD consists of "instruction provided during a time during the regular school day for focused instruction on the state-adopted ELD standards to assist English learners to develop critical English language skills necessary for academic content learning in English" (California Code of Regulations, Title 5, Section 11300[a]), and integrated ELD is "instruction in which the state-adopted ELD standards are used in tandem with the state-adopted academic content standards. Integrated ELD includes specifically designed academic instruction in English" (California Code of Regulations, Title 5, Section 11300[c]).



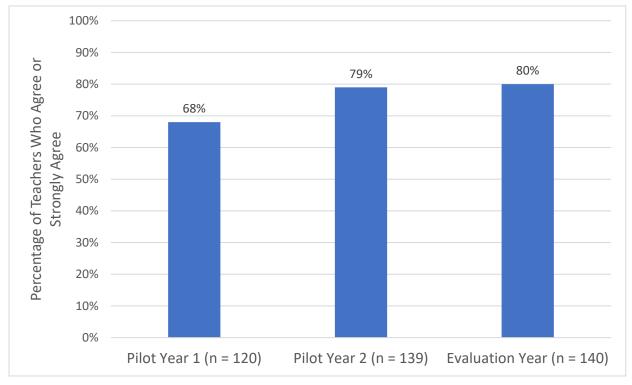


Figure 5.12 Teachers' Level of Comfort With Implementing the ERWC 3.0

Source: Evaluation Year end-of-year survey

ERWC teachers' comfort level with the curriculum increased drastically from Pilot Year 1 to Pilot Year 2 and slightly more from Pilot Year 2 to the Evaluation Year.

Another possible explanation is that the revisions made after the first pilot year strengthened the curriculum. Teachers shared that they appreciated that the curriculum developers incorporated some of their feedback in the module revisions. Specifically, teachers commented that eliminating unnecessary activities strengthened the modules.

ERWC teachers also noted that they appreciated how the ERWC 3.0 provides more flexibility for teachers compared to the ERWC 2.0. The flexibility allows teachers to choose modules based on what will serve their students in a given year. This finding is a sharp contrast from Pilot Year 1, when teachers often shared that the ERWC 3.0 had too many modules to choose from.

Challenges

Teachers found fostering and sustaining student engagement to be difficult during online learning

Teachers' primary concern, especially at the beginning of the school year, was with engaging students in online learning. Teachers noted that students were disengaged, as evidenced by not turning in assignments, logging into the online videoconferencing but not actually being



present, and not participating in online discussions. This disengagement was notably a challenge in ERWC classes because so much of the curriculum is centered on student-to-student interaction, such as discussing texts and ideas in pairs or small groups, and developing group presentations. In Pilot Year 2, students' engagement in classroom discussions was identified as a strength; the shift to online learning for the Evaluation Year derailed this important component of the curriculum.

There are a number of reasons for students' apparent disengagement. Some students did not have access to adequate devices or a strong enough internet connection, making it challenging for them to log on. Teachers also reported that the fallout from the pandemic caused students to take on other responsibilities, such as getting a job to help support their families or taking care of their siblings. Additionally, some students were living in spaces with multiple families or with other family members who were attending school and/or working from home, and they did not have a quiet place to work.

Early in the school year, teachers did their best to use the breakout room feature of their video conferencing technology so that students could discuss ideas in small groups. However, some teachers reported that the breakout rooms were unsuccessful because students were still hesitant to speak online, even in small groups. Teachers shared that they would pop into breakout rooms, and it would be silent, as noted by one teacher:

I found that if I put kids into breakout rooms to have them discuss ideas, they did not. I would pop in and find them completely silent, and also their work would not get done on those days (leading me to believe they may have gone off to do something else).

Some students shared with the teachers that no one spoke in their breakout room. Teachers attributed students' reluctance to their not knowing one another.

In order to address the challenge of students not sharing in breakout rooms, teachers implemented a number of solutions. Some teachers assigned roles to students. One role was to be the "recorder" who had the responsibility to report back to the large group on what the small group had discussed. Other teachers created shared documents or slides on which group members were expected to take notes from their discussions.

Some teachers commented on how grouping influenced the success of breakout rooms. Teachers grouped students in a number of ways, including randomly, based on ability, based on topic, and based on students' preferences. Regardless of how students were grouped, teachers emphasized the importance of keeping students in the same group for a prolonged period of time so they could get to know one another and gradually become more comfortable sharing with one another.

Another strategy teachers used to solicit more student participation was to transform engaging writing prompts into discussion prompts. According to teachers, students were more motivated to share their thoughts when discussion topics were particularly interesting. Some teachers also



opted to give students only one or two discussion questions at a time. That way, discussions could be more focused and students would not feel overwhelmed by the number of questions.

While some teachers found some success in the strategies that they implemented to support more productive breakout rooms, some moved away from using breakout rooms.

In addition to noting that students were not comfortable sharing through video platforms, teachers reported that students were overwhelmed, stressed, and anxious about how unsettled some aspects of their lives had become. One teacher described how this experience was contributing to lower levels of student engagement: "Engagement in general is low—kids are burning out fast and seem to be increasingly overwhelmed. More kids are just refusing to engage at all—seems to be a response to overwhelming stress." Teachers also reported that students were facing severe mental health challenges, making it difficult to focus on learning. One teacher described the challenges their students faced as follows:

Due to all the trauma from the pandemic, our school saw the numbers of failing and struggling students (students earning F or D in their classes) skyrocket. All of this was happening in our neighborhoods even as the more affluent sections of the city, physically adjacent to our community, continued to experience extremely low infection rates, hospitalizations, and death. That sharp contrast also has had a bearing on the mental health of our community. It seemed almost inhumane to ask students to focus on learning, to keep up with the demands of the standard curriculum as their world fell apart around them for months on end.

Teachers and coaches mentioned the importance of facilitating active learning by creating multiple ways for students to participate. Many students chose not to turn their cameras on for a variety of reasons, such as that their internet was unstable or they were concerned that a peer may post a picture of them on social media. Therefore, teachers created other ways for students to join the conversation. As one coach indicated, "[The teacher]'s students participated actively using the chat box. They are not comfortable using their cameras. The whole-group discussion works better than breaking them into small groups as they don't know each other well and are not as likely to stay on task. [The teacher] has them respond in a variety of ways throughout the lesson, which increases engagement."

Many teachers used apps and add-ons that allowed students to have online conversations, including Jamboard (a digital interactive whiteboard developed by Google), Padlet (a digital platform where users can upload content and comment on virtual bulletin boards), Flipgrid (a digital platform where users can post videos of themselves), and Pear Deck (an add-on for Google Slides that allows teachers to quickly insert formative assessment questions for students to respond to). Teachers also utilized the discussion board features of their learning management systems, where students could share ideas and respond to one another.



Despite a slight increase in student engagement as the school year progressed, many teachers reported that the ERWC was much less effective when taught in an online setting. One teacher described the challenge of teaching modules online as follows:

Teaching ERWC online is hard and the "fun" of the class is missing this year. The discussions which normally drive the interest in the topic and fuel the desire for them to write about the topic [have] been nonexistent this year. My passion for the topics does not translate well through Zoom and the interest level in the material is not as high as it normally is. Students are just not as engaged in general this year. It is sad to watch them just go through the motions of the assignments and not see the spark of interest that I normally see. "Juvenile Justice" and ["The Curious Incident of the Dog in the Night-Time"] are normally student favorites, but this year they both fell flat.

More specifically, teachers mentioned that discussions are an essential aspect of the ERWC, and cultivating meaningful discussions in breakout rooms was challenging.

Teachers were unable to complete the suggested number of modules

Throughout the grant, teachers expressed concern about teaching the required number of modules (two portfolio modules, three mini-modules, and five full-length modules), and this concern was compounded during the 2020/21 school year. Teachers described how modules took much longer to teach online due to a number of reasons, including having fewer instructional minutes than normal, districts' requirements for what teachers had to teach during synchronous learning time, students not turning in work or completing assigned reading, teachers needing to spend more time modeling and breaking down instructions, modules having too many activities, and content not translating in an online setting. One teacher summed up the challenges as follows:

The loss of instructional time has greatly affected teaching ERWC. I'm constantly pulled between completing the modules quickly to meet pacing needs and slowing down substantially to meet student needs. With distance learning, there are also a lot of disconnects with learning in general due to the many tech issues and the increased emotional pressure on students. Consequently, in order to do enough additional checks for understanding needed because of new learning realities and attend to student social-emotional needs, I need to slow down quite a bit, especially for my SPED and EL students.

Reduced instructional time was the reason most commonly cited by teachers for not having enough time to complete the required number of modules. In some cases, teachers had drastically fewer instructional minutes than they had when learning was fully in person, as described by one teacher:

I teach two classes a week to my seniors for twenty to forty minutes a day. This is less than half what I would normally have with them. There is no way I could get



through the curriculum. I was also expected to do SEL [social emotional learning] activities with them this year as well due to the mental health issues that have occurred due to the pandemic.

This teacher's mention of the district requiring teachers to complete SEL activities points to a common requirement of many districts during this period. Students faced unparalleled mental health challenges during the pandemic, and district leaders viewed it as essential to support students by providing opportunities for SEL. While some districts did not require teachers to implement SEL, some teachers opted to infuse SEL into their lessons anyway because they viewed it as important for supporting students' well-being. As one ERWC teacher described: "I have an opening journal I do with each class. This sometimes relates to the specific ERWC curriculum, but sometimes it's just sort of life stuff, how we [are] doing, et cetera, et cetera."

Regarding workload, students were overwhelmed with the number of assignments that teachers expected them to complete. Teachers reported that it was challenging for them to get some students to complete any work. In some cases, teachers mentioned that students attended the synchronous learning sessions but did not submit assignments that require writing. As one teacher stated, "Seniors [are] in danger of failing because they are not turning in any written work, even though they are generally present in their online virtual classes." Teachers recognized that they were giving too many assignments at the beginning of the year. As the year progressed, teachers tended to reduce the number of assignments and give students more flexibility on completing them, as described by one ERWC teacher:

We are giving [students] a little more leeway on turning assignments in. The deadlines are a little more flexible. If they're working with us, we will work with them. We want to make sure that they have enough time to do stuff. If they're feeling overwhelmed, if they have other issues, if they have issues with their internet, we don't want to penalize them for those things. The grading is standard. I'm going to grade it the way I normally do, but the deadlines, I'm going to be a little bit more forgiving because of the situation we're in.

Teachers noted that they chose to spend extra time supporting students while teaching modules online instead of trying to complete the required number of modules. One teacher explained how students did not understand some of the material, causing them to take more time on it: "Modules took much longer than expected. It took students a little longer to grasp concepts; to that end, there were several moments within each module when things had to be re-taught or re-explained."

Teachers shared that the modules included more activities than they were able to teach, and they addressed this challenge in various ways. Some made tough decisions about which activities to include, as illustrated by one teacher:

At some points, it feels like we're expected to just push students to go through the motions rather than take the time to actually practice and learn these new skills. I



find myself cutting out so much because I know my students need me to help them focus on less skills/activities so they can genuinely learn them and become proficient at them.

Teachers indicated that they wished they had more time to complete more activities in the modules, and they hoped to do so when learning returns to an in-person format.

Other teachers thought it was valuable to spend time completing the activities in the Reading Rhetorically section of the arc, which caused them to skip some of the activities in the Writing Rhetorically section of the arc, as indicated by one teacher:

Many of the modules have too many activities, overwhelming the teacher and actually causing a lot of work to weed out or merge activities. Many times, there is an assumption that students have the background knowledge going into a topic. Writing is a problem area. There is never enough time for the full writing process; it is so rushed at the end.

Lastly, some teachers noted that it was challenging to teach some content in an online setting. In particular, some grade 12 teachers were hesitant to teach the Shakespeare modules online because those modules were too complicated, and teachers did not think it would work to teach them remotely. Although all grade 12 teachers were required to teach a Shakespeare module as part of the curriculum, only 54 (46%) of the 118 participating teachers reported doing so.

Teachers would like texts to include more fiction, more diverse perspectives, and more current topics

When asked to describe the weaknesses of the ERWC, teachers called for more literature-based texts. Some teachers mentioned that they missed reading fiction, and others mentioned that it is important for students to read fiction. As one teacher shared, "The lack of fiction is disheartening; where will our artists come from?" Some teachers noted that they perceived more student engagement when students were reading fiction.

While teachers appreciated that the texts in the ERWC 3.0 had been updated, they underscored the importance of continuing to update the texts. One teacher provided an example of a text that already needs to be updated: "'Juvenile Justice' is a prime example. The state laws change from year to year. California changed its criteria on age limits for charging juveniles as adults to 16–18 for violent crimes. ERWC needs to make it their business to do updates to the module materials on a regular basis."

Regarding the text selections, some teachers also mentioned that the texts included in modules only presented one side of the issue. Teachers would like texts to represent a wider range of perspectives on issues. Additionally, some teachers reported wanting more texts written by authors of color included in the curriculum.



Teachers had low morale while teaching during the pandemic

At the beginning of the school year, coaches noted that many teachers were overwhelmed and not adequately supported. One coach shared that a teacher was "barely hanging in there." Teachers spent copious amounts of time modifying modules to make them engaging for online learning, but student engagement remained low in some classes.

In interviews, ERWC teachers shared that they were working much harder than during a normal school year and seeing much less student growth, which was disheartening. One teacher described their feelings about the lack of student growth as follows:

I think a lot of us have had to reckon with the fact that our students just aren't going to get quite as much out of this year as they would during a regular school year. I think that's been a big adjustment for all of us because it sort of makes us feel uncomfortable. It makes us feel like maybe we're not doing what we're supposed to be doing, but looking at the situation holistically, I think it just is what it is. We fought it and there were a lot of tears shed and like pretty tense discussions in our staff meetings and whatnot. But I think I've come to accept the fact that that's just what's going to happen this year. That's been a tough one for me.

One coach recognized a similar feeling in the teachers they coached: "All of my teachers are nearing burn-out. They are struggling with being online so much. They are struggling with how their students are performing, or not performing. They are working so hard to do everything for and provide everything for their students that they are exhausted."

Some teachers mentioned that they are usually inspired by students' growth and progress in the ERWC. However, they did not notice that shift while learning took place primarily online. They described this experience as somewhat disappointing because observing students' growth is one of the most rewarding aspects of being a teacher.

Results from the study in the 2020/21 school year do not reflect teachers' and students' abilities

Teachers reported that they expected their students to have low scores on the final assessment because the classes were not covering as much material as they normally would and students had been less motivated during this year compared to normal school years. One comparison English teacher described how SEL has become a priority in their classroom:

This year has been such an outlier, it is difficult to imagine it being used as a measure of the effectiveness of the curriculum. Right now, the goal of education in my school is, more than anything, keeping students connected and engaged in a way that encourages them. Social and emotional learning has become the major focus, and rightfully so. This has necessitated a reduction in what can be covered in class and how deeply it can be covered.



WestEd researchers let teachers know that they recognized that students' scores on the final assessment may be lower than they would be during a normal school year, potentially influencing the outcome of the evaluation.

Recommendations from the Evaluation Year

Encourage teachers to trust themselves as educators

The teachers who felt empowered to adapt the curriculum so that it met the needs of their students reported enjoying teaching the curriculum more so than teachers who felt they had to teach the curriculum as written. It may be beneficial to continue to convey that ERWC teachers are trusted as professionals to make decisions about which aspects of the curriculum to teach.

Consider organizing a peer-to-peer coaching model for ERWC teachers

ERWC teachers viewed the coaching aspect of the grant as supportive because coaches helped them plan and provided encouragement when the teachers felt discouraged. When some teachers in the grant began teaching the ERWC 3.0, they were overwhelmed by the number of modules and activities in each module. Having a coach may help alleviate some of new teachers' anxiety about teaching a new curriculum.

Develop ways to keep the modules updated

ERWC teachers believed that relevant texts and topics are essential for student engagement. Finding ways to keep modules updated may help sustain their relevance and the corresponding student engagement.

Develop ways to support teachers to teach writing

In all three years of the study, teachers taught the activities associated with reading more than the activities associated with writing. Additionally, students were able to articulate strategies for reading challenging texts more often than they were able to articulate strategies for writing a challenging essay. Teachers have shared that they would like infused in the modules more concrete strategies for teaching writing. Developing resources for teachers to support students in developing writing strategies may be beneficial for students.

Continue to investigate why the grade 11 ERWC is viewed more favorably than the grade 12 ERWC

Findings suggest that teachers view the ERWC 3.0 more favorably in grade 11 as compared to grade 12. One possible explanation is that the grade 11 curriculum includes a wider variety of genres and culminating tasks, which provides students with varied ways to learn and demonstrate their knowledge. Another possible explanation is that the yearlong course was new in grade 11, but it was revised for grade 12; grade 11 teachers may have provided feedback based on comparing the ERWC to other curricula, and grade 12 teachers may have provided feedback based on comparing the ERWC 3.0 to previous versions of the ERWC that they had taught. To fully understand why the ERWC 3.0 may be viewed more favorably in grade 11 as compared to grade 12, further investigation is needed.



6. Impact Evaluation

Grade 11 Impact Evaluation

The WestEd evaluation team conducted impact analyses separately for each outcome measure and grade level. This section reports on how the grade 11 impact evaluation was carried out and provides detailed findings from the analysis.

Methodology for Grade 11 Impact Evaluation

The methodological design for the grade 11 impact evaluation for the evaluation year (2020/21 school year) was a randomized controlled trial (RCT), where participating students within each school were randomized by WestEd into either the ERWC or a comparison English course. Students were analyzed according to whether they were randomized into the ERWC or comparison course ("intent-to-treat"). Two separate study samples were evaluated—one consisted of students who took the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment (the "Non-PT ICA") and the other sample consisted of students who took the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment (the "Summative Assessment"). Each sample was analyzed separately due to the assessments being different and because there was no overlap of study participants into the separate samples. Additional information about each assessment is provided in the "Outcome Measures for Grade 11 Impact Evaluation" section.

Process for Randomization

As part of the process for randomizing students²⁸ into the ERWC or the comparison English course in grade 11, high schools had their grade 10 students fill out course preference forms around February or March of 2020 to indicate which courses the students wanted to take in grade 11 the following school year. Based on information from the course preference forms, each study school created a list of all the students (the "randomization list") who chose to take the standard college preparation English course in grade 11. In other words, this randomization list excluded students who chose to take Advanced Placement English, Honors English, or International Baccalaureate English in grade 11. Students who received special education

²⁸ It was not feasible to randomize teachers into treatment or comparison conditions within this study, as school leaders and teachers during the recruitment phase of this project strongly communicated to WestEd that they would not participate in the study if one of the requirements was that teachers needed to be randomized to teach either the ERWC or a comparison English curriculum. Based on observable characteristics, there did not appear to be large differences between the ERWC and comparison English teachers. Among the grade 11 teachers during the evaluation year, 21 (60%) of the 35 ERWC teachers had a master's or doctoral degree, and 27 (77%) of the 35 teachers of comparison English had a master's or doctoral degree.



services were included on the school's randomization list if they planned to enroll in a college preparation English course in grade 11 and planned to take the ELA/Literacy Summative Assessment at the end of grade 11. This randomization list thus included all students who were eligible for inclusion in the analytic sample. It included students who planned to take a standard college preparation grade 11 English course, who were expected to take the ELA/Literacy Summative Assessment, and who did not need to be assigned to a particular English teacher.

After a school had created the randomization list of students who had chosen to take the standard college preparation English course in grade 11, the school provided WestEd with the list along with the following information:

- the number of students that WestEd was to randomly assign to the ERWC
- the number of students that WestEd was to randomly assign to the comparison grade 11 English course

This information was uploaded through a secure online platform by a school administrator, counselor, or lead teacher. Schools were allowed to have as few as one-third of the randomized students placed into the ERWC and as many as two-thirds of the randomized students placed into the ERWC—this flexibility was to accommodate the fact that each school had a different proportion of teachers who would teach the ERWC as compared to the comparison English course in grade 11.

The WestEd team then used a random number generator to randomly assign each of the students on the school's randomization list into either the ERWC or the comparison English course. WestEd provided the list of course assignments back to each school through a secure link. The schools then used their assignment list to place each student in the appropriate English course when creating the master schedule. After each school had created its master schedule (usually in the summer of 2020), the school uploaded the class rosters of the randomized students through a secure form in a place that WestEd researchers could access so that the WestEd research team could ascertain that the students were properly placed into either the ERWC or the comparison English course. The schools also provided updated class rosters to WestEd in the fall and spring of the 2020/21 school year. Rosters for both the fall and spring semesters were necessary because students could be shuffled into different classrooms and into different courses (i.e., from ERWC to the comparison English course, or vice versa), with different teachers, between the fall and spring semesters. Among students who took the Non-PT ICA (i.e., those included in the analytic sample), 94.9 percent of the students took the English course that they were assigned to for both semesters of the 2020/21 school year (Table 6.1). Among the students who took the Summative Assessment (i.e., those included in the analytic sample), 91.8 percent of the students took the English course that they were assigned to for both semesters of the 2020/21 school year (Table 6.1). Regardless of whether the student took the class that they were randomly assigned to, WestEd researchers analyzed the students based on their assignment (i.e., an "intent-to-treat" analysis).



Table 6.1 Rate of Compliance for WestEd Random Assignment

Outcome Measure (Study Sample)	Number of Students Taking the Course That They Were Assigned to	Number of Students in Final Study Sample	Compliance Rate
Non-PT ICA	1,065	1,122	94.9%
Summative Assessment	1,702	1,855	91.8%

Note. 589 out of 622 comparison and 476 out of 500 ERWC students with Non-PT ICA scores took the course that they were assigned to, and 890 out of 975 comparison and 812 out of 880 ERWC students with Summative Assessment scores took the course that they were assigned to. Regardless, the analytic methodology for the impact analysis of the RCT is an intent-to-treat analysis.

Source: Course roster data provided by study high schools or districts

In addition, at the beginning of the 2021/21 school year, once students were enrolled in either the ERWC or the comparison English course, students had the option to opt out of the study. Students who chose to opt out of the study are not included in the analytic sample, but they are included in the attrition calculation (presented later) because they were randomized into either the ERWC or comparison course.

Analytic Methodology

An intent-to-treat (ITT) estimate was calculated to assess the impact of assignment to the ERWC on student achievement:

$$Y_i = \alpha + \sum_{k=1}^{K} \beta_k * SCHOOL_{i,k} + \gamma * T_i + \varphi * Student_i + \theta * Preachievement + \varepsilon_i$$

where Y_i is the grade 11 achievement on a standardized ELA assessment for student i, $SCHOOL_{i,k}$ is a vector of binary variables indicating whether or not student i was enrolled at high school k (and thus the randomization block that the student participated in; this variable also accounts for the difference in random assignment ratios across schools), T_i is a binary treatment status variable indicating whether or not student i was assigned to the ERWC, $Student_i$ is a vector of student-level characteristics that comprises female (yes/no), race (binary indicator variables for Hispanic, Asian, African American, and other, with the category of White being the omitted variable²⁹ because it is alphabetically last), age in years (as of June 30, 2020), English Learner designation (yes/no as of the 2019/20 school year), and special education status (yes/no variable indicating whether the student had an individualized education plan as of the

²⁹ When including categorical variables as binary indicators, one variable needs to be omitted from the analysis to create a reference group.



2019/20 school year). *Preachievement* consists of the following two achievement measures: (1) the scale score on the Language and Vocabulary Use Focused Interim Assessment Block (FIAB)³⁰ that student i took at the beginning of grade 11 in fall 2020, and (2) the scale score on the grade 8 Smarter Balanced ELA/Literacy Summative Assessment that student i took, usually during the 2017/18 school year. α , β , γ , ω , and θ are parameters to be estimated from the data. ε is the error term that is (assumed to be) independent and identically distributed. γ represents the impact of being assigned to enroll in the ERWC, as all students were analyzed based on their assignment to the treatment or comparison condition; this parameter is the ITT estimate, and it is the fundamental test of the impact conducted in this evaluation.

Missing data approach

The dummy variable adjustment method was used to handle missing baseline data (Puma et al., 2009). This method creates two new variables for each variable that contains missing data. The first variable is an adjustment variable where all missing cases are set to a constant. The second variable is created as a binary zero-one variable where a one indicates that the observation is missing and a zero indicates a non-missing value. When the analysis is run, the model uses the two newly created variables instead of the original variables for all baseline data that contain missing data. In the impact analysis, the following variables had missing data and thus the dummy variable adjustment method was used for these variables: grade 8 Smarter Balanced ELA/Literacy Summative Assessment scale score; fall 2020 Language and Vocabulary Use FIAB scale score; age; gender; race/ethnicity; English Learner status; and special education status. For missing outcome data, a complete case approach was used, as all students with missing outcome data were excluded from the analysis.

Outcome Measures for Grade 11 Impact Evaluation

Grade 11 students in the impact evaluation took one of two standardized ELA/Literacy assessments at the end of grade 11: the adjusted form grade 11 Smarter Balanced ELA/Literacy Summative Assessment (referred to as the "Summative Assessment") or the grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment (referred to as the "Non-PT ICA").

Developed by Smarter Balanced, the Summative Assessment was a condensed version of the typical standardized assessment that students had usually taken in prior years (hence it was an "adjusted form"). The assessment was shortened as a result of many students being in remote learning during the 2020/21 school year, including while they were taking this test. As noted by the California State Board of Education, the assessment was shortened to ease the burden on local education agencies and on the students taking the test.³² The California State Board of Education gave districts the option to administer this adjusted form Summative Assessment in

³⁰ The Language and Vocabulary Use FIAB is a part of the Smarter Balanced Interim Assessment Block assessments, and it consists of 15 questions that assess the Language and Vocabulary Use Target (Assessment Target #8) of the Writing Claim (Claim #2).

³¹ The WestEd team used the constant value of "99."

³² Refer to the California State Board of Education November 2020 agenda online (accessed February 6, 2022): https://www.cde.ca.gov/be/ag/ag/yr20/documents/nov20item04.docx



the 2020/21 school year; however, administering the Summative Assessment was not mandatory.³³ The Washington State Office of Superintendent of Public Instruction (OSPI) did not provide districts with the option to administer this Summative Assessment.³⁴

This Summative Assessment in 2020/21 was reduced by approximately 50 percent within each claim for the computer adaptive test portion as compared to the typical Summative Assessment that had been administered in previous years.³⁵ The Summative Assessment in 2020/21 contained a total of 22 items for the Computer Adaptive Test portion (10 for the Reading Claim, 4 for the Writing Claim, 4 for the Listening Claim, and 4 for the Research/Inquiry Claim). For the Performance Task section, there were a total of 4 items (3 for the Writing Claim and 1 for the Research/Inquiry Claim).

Six of the 17 study schools did not administer this Summative Assessment in 2020/21. These were the three high schools in Washington that did not test students in grade 11 (Washington schools conduct their standardized testing in grade 10) and three California schools whose districts had decided that their schools would not administer this assessment.³⁶

Because of the possibility that some schools would not administer the Summative Assessment at the end of the 2020/21 school year, WestEd created a backup plan, which was to administer the Non-PT ICA.³⁷ As a result, the six schools that did not administer the Summative Assessment administered the Non-PT ICA, which consists of 38 questions, 35 of which are machine scored and 3 of which are hand scored. From among the 38 questions, 15 assess Claim 1 (Reading), 6 assess Claim 2 (Writing), 9 assess Claim 3 (Listening), and 8 assess Claim 4 (Research/Inquiry).

The Non-PT ICA is a standardized assessment administered to students online. The online testing platform is very similar to that of the Summative Assessment. As a result, all teachers (both treatment and control) had to follow strict guidelines in the administration of the test (Regents of the University of California, 2021). More specifically, study teachers were required to log in to the Test Information Distribution Engine to create a test session. Once a test session was created, students needed to log in to the system and then be admitted into the test session by the teacher. As students progressed through the test, the teacher was able to monitor test

For more information about OSPI's decision about standardized testing in the 2020/21 school year, see https://www.k12.wa.us/sites/default/files/public/communications/2021docs/Fact-Sheet-Fall-2021-Assessment-Plan.pdf.

³³ Refer to the California State Board of Education November 2020 agenda online (accessed February 6, 2022): https://www.cde.ca.gov/be/ag/ag/yr20/documents/nov20item04.docx

³⁵ Because the Performance Tasks are designed to be integrated tasks, the blueprints associated with the Performance Tasks were not adjusted. The test blueprint for this modified assessment can be found at the following locations:

https://portal.smarterbalanced.org/wp-content/uploads/2020-21-Summative-Assessment-Full-and-Adjusted-Form-BlueprintsOptions.pdf (accessed February 6, 2022) and https://portal.smarterbalanced.org/library/en/elaliteracy-adjusted-blueprint.pdf (accessed February 6, 2022).

³⁶ The decision on whether a school would administer this Summative Assessment was made at the district level as opposed to at the school level. See, for instance: https://edsource.org/2021/local-assessments-an-option-if-smarter-balanced-tests-not-viable-u-s-education-officials-affirm/652829.

The ICA consists of both the Performance Task portion of the test and the Non-Performance Task portion of the test. Based on data provided by Cambium Assessment on how long it takes students to complete each portion of the ICA, it would take a student at the 80th percentile of the distribution on test-taking duration more than 4 hours to complete both portions of the ICA (i.e., 20 percent of the students would take even longer to complete the full ICA). Because administering a test that would take more than 4 hours to complete and asking students to take it at home (which many students were at this time) would have been an unreasonable request, the WestEd team chose to have students take only the Non-PT portion of the ICA. The 80th percentile of students in terms of test-taking duration was expected to complete this portion in 2 hours and 2 minutes.



progress for each student. After the last student had completed the assessment or the class period ended (whichever came first), the teacher closed the test session.³⁸ If students did not complete the assessment within a given class period, teachers opened a new test session during a subsequent class period. In this way, the assessment was administered in a standardized format.

The Grade 11 ELA/Literacy Interim Comprehensive Assessment is "designed to provide a high-level overview of student performance in the same way as summative assessments. ICAs are built on similar blueprints to the full-form summative assessments" (Regents of the University of California, 2021, p. 2). Moreover, the ICAs "can be administered in standardized and non-standardized ways in the classroom" (Regents of the University of California, 2021, p. 3). In the case of this study, all teachers administered the assessment in a standardized way, as described earlier.

To ensure the valid and reliable scoring of the three hand-scored items on the Non-PT ICA, study teachers were not allowed to score their students' tests. Instead, WestEd contracted with Cambium Assessment to use its proprietary automated scoring system to score these three items. For these items scored by Cambium, 20 percent of the student responses were randomly sampled and additionally scored by a human to assess the reliability of Cambium's automated scoring (see Table 6.2). As described in the What Works Clearinghouse Standards Handbook, "Reliability of an outcome measure may be established by meeting the following minimum standards: internal consistency—such as Cronbach's alpha—of .50 or higher; temporal stability and test-retest reliability of 0.40 or higher; or inter-rater reliability—such as percentage agreement, correlation, or kappa—of .50 or higher" (What Works Clearinghouse, 2020b, p. 83). In this case, the correlation for each item meets the 0.50 minimum threshold.

Table 6.2 Inter-Rater Reliability on the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Item Type	Item Number	Correlation	Number of Students
Short Answer	11	0.51	1,504
Short Answer	14	0.85	822
Short Answer	21	0.64	1,177

Source: Non-PT ICA score data from Cambium Assessment

For the Non-PT ICA, each student's achievement was measured using a theta score. The theta score was calculated using Item Response Theory (IRT). The IRT estimates were based on the 38 items that mix 35 multiple choice/multiple select items with 3 short answer items. Consistent with how the scoring was done for the Summative Assessment, a two-parameter

³⁸ Although the test was an untimed test, students all took the test during a test administration so that all students would need to log off when the test administration was over (i.e., when the teacher closed the testing session).



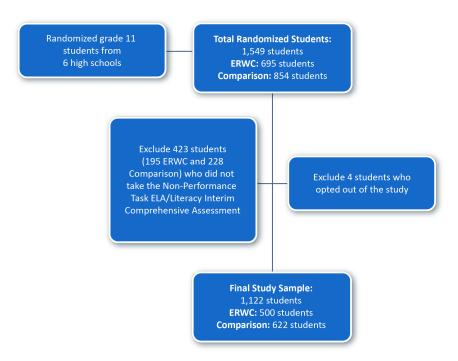
logistic (2PL) model was used for the multiple choice/multiple select items and a generalized partial credit (GPC)³⁹ was used for short answer items. This combination of 2PL and GPC models was used to generate the theta scores. The theta estimates ranged from -3.00 to +3.00 (with higher numbers indicating higher achieving students) and had a mean of 0.0 and a standard deviation of 1.00. The theta score was used as the outcome measure for the study sample that took the Non-PT ICA.

The sample of students who took the Non-PT ICA and the sample of students who took the Summative Assessment were analyzed separately due to the different tests. There was no overlap in samples between those students who took the Summative Assessment and those who took the Non-PT ICA (i.e., no students in the analytic samples took both tests).

Data Included in Analysis for Grade 11 Impact Evaluation

Figure 6.1 is a consort diagram that provides information about how the sample of students who took the Non-PT ICA was formed.

Figure 6.1 Consort Diagram for Students in Schools That Administered the Grade 11 Non-Performance Task Portion of the ELA/Literacy Interim Comprehensive Assessment, 2020/21



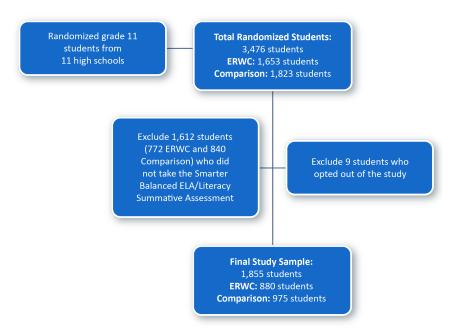
Source: Student data collected from study high schools or districts, and Grade 11 Non-PT ICA outcome scores for 2020/21 school year collected from Cambium Assessment

³⁹ Because it is unknown how the ERWC intervention impacted the treatment group, only the control students were included in the initial IRT estimation that yielded both the item parameter estimates for all 38 items and the theta estimates for the comparison students. The resulting item parameter estimates were then applied to estimate the theta scores for both the treatment group and the comparison group.



Figure 6.2 is a consort diagram that provides information about how the sample of students who took the Summative Assessment was formed.

Figure 6.2 Consort Diagram for Students in Schools That Administered the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment, 2020/21



Source: Student data and Summative Assessment outcome scores for 2020/21 school year collected from study high schools or districts

Attrition From Grade 11 Impact Evaluation

Table 6.3 reports the attrition that was observed for the two study samples—those who took the Non-PT ICA and those who took the Summative Assessment. All students with missing outcome data and who opted out of the study were counted as attrition.



Table 6.3 Attrition Observed for the Two Study Samples

Outcome Measure (Study Sample)	Randomized ERWC Students	Randomized Comparison Students	Final ERWC Sample	Final Comparison Sample	Overall Attrition	Differential Attrition
Non-PT ICA	695	854	500	622	27.57%	0.89
Summative Assessment	1,653	1,823	880	975	46.63%	0.25

Source: The Non-PT ICA data were collected from Cambium Assessment; the Summative Assessment data were collected from the six participating school districts with schools that administered the Summative Assessment

Student Characteristics of Sample in Grade 11 Impact Evaluation

This section describes the student characteristics of the analytic sample included in the grade 11 impact evaluation. Table 6.4 presents the characteristics of students who took the Non-PT ICA as the outcome measure; these are the students who were included in the impact estimate.



Table 6.4 Characteristics of Students Who Took the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Student Characteristics	Number of Students	Percentage
Gender		
Male	634	57%
Female	487	43%
Missing	1	0%
Ethnicity		
Asian	38	3%
Black or African American	23	2%
Hispanic	791	71%
Other	13	1%
White	206	18%
Missing	51	5%
Age		
14	1	0%
15	328	29%
16	751	67%
17	41	4%
Missing	1	0%
English Learner		
Yes	119	11%
No	996	89%
Missing	7	1%
Special Education		
Yes	90	8%
No	1,032	92%
Missing	0	0%
Total	1,122	

Note. The ethnicity group "Other" is used as a catchall for ethnicity/race groups with sample sizes too small to be presented in the report. The category includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown. Age is based on date of birth and is defined as age in years as of June 30, 2020. Students with missing data for any of the categories were handled in the analytic model using the dummy variable adjustment method (Puma et al., 2009). The table shows the sample of all students with outcome data from the Non-PT ICA administered in spring 2021. Source: Student data collected from districts that had schools that administered the Non-PT ICA



Table 6.5 presents the characteristics of the students who took the Summative Assessment as the outcome measure; these are the students who were included in the impact estimate.

Table 6.5 Characteristics of Students Who Took the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment

Student Characteristics	Number of Students	Percentage
Gender	·	
Male	954	51%
Female	894	48%
Missing	7	0%
Ethnicity	·	
Asian	97	5%
Black or African American	83	4%
Hispanic	1,220	66%
Other	92	5%
White	344	19%
Missing	19	1%
Age	·	
14	1	0%
15	672	36%
16	1,082	58%
17	74	4%
18	1	0%
Missing	25	1%
English Learner		
Yes	219	12%
No	1,629	88%
Missing	7	0%
Special Education		
Yes	166	9%
No	1,681	91%
Missing	8	0%
Total	1,855	

Note. The ethnicity group "Other" is used as a catchall for ethnicity/race groups with sample sizes too small to be presented in the report. The category includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown. Age is based on date of birth and is defined as age in years as of June 30, 2020. Students with missing data for any of the categories were handled in the analytic model using the dummy variable adjustment method (Puma et al., 2009). The table displays the sample of all students with outcome data from the Summative Assessment administered in spring 2021.

Source: Student data collected from districts that had schools that administered the Summative Assessment



Baseline Equivalence for Grade 11 Impact Evaluation

Although this RCT study had low attrition as defined by the What Works Clearinghouse (2020b), baseline equivalence was still calculated on the pre-achievement variables (the Language and Vocabulary Use FIAB administered in fall 2020 and the Grade 8 ELA/Literacy Summative Assessment that was administered to most of the study sample in 2017/18) for each sample of students (see Tables 6.6 and 6.7). By using Hedges' g, the baseline mean differences are given as a standardized number to make them comparable across different outcome measures (see, for instance, Wolf et al., 2017). The absolute effect size difference yielded a value below .25 for the Grade 8 ELA/Literacy Summative Assessment in 2017/18 and a value below .05 for students who took the Language and Vocabulary Use FIAB administered in fall 2020. Although it is not necessary to establish baseline equivalence for low attrition RCTs, the impact analyses for both outcome measures included the baseline test scores as covariates in order to increase precision of the estimates.

Table 6.6 Baseline Equivalence for the Analytic Sample That Took the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Baseline test	Number of ERWC Students	ERWC Student Mean (SD)	Number of Comparison Students	Comparison Student Mean (SD)	Standardized Mean Difference (Hedges' g)
Fall 2020 FIAB	388	2539.78 (105.17)	440	2528.74 (100.50)	0.038
Grade 8 Summative Assessment	346	2550.56 (79.83)	467	2541.41 (81.61)	0.084

Note. FIAB refers to the Language and Vocabulary Use Focused Interim Assessment Block that students took during the fall of 2020. 294 students did not have an FIAB score from fall 2020, and 309 students did not have a grade 8 Summative Assessment score. The FIAB and the Grade 8 Summative Assessment means for the ERWC students were calculated using the observed mean for comparison students plus the regression model estimate from a linear regression model using FIAB as the dependent variable and ERWC assignment as an independent variable, in addition to including school dummy variables. Source: Student data collected from study high schools or districts that administered the Non-PT ICA



Table 6.7 Baseline Equivalence for the Analytic Sample That Took the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment

Baseline test	Number of ERWC Students	ERWC Student Mean (SD)	Number of Comparison Students	Comparison Student Mean (SD)	Standardized Mean Difference (Hedges' g)
Fall 2020 FIAB	754	2546.52 (97.01)	791	2543.53 (98.35)	0.004
Grade 8 Summative Assessment	715	2539.07 (85.61)	780	2524.24 (152.64)	0.066

Note. FIAB refers to the Language and Vocabulary Use Focused Interim Assessment Block that students took during the fall of 2020. 310 students did not have an FIAB score from fall 2020, and 360 students did not have a grade 8 Summative Assessment score. The FIAB and the Grade 8 Summative Assessment means for the ERWC students were calculated using the observed mean for comparison students plus the regression model estimate from a linear regression model using FIAB as the dependent variable and ERWC assignment as an independent variable, in addition to including school dummy variables. Source: Student data collected from study high schools or districts that administered the Summative Assessment

Impact Results for Grade 11

Students assigned to the ERWC had higher achievement on the Non-PT ICA compared to students assigned to the comparison course, and the difference was statistically significant. For the sample of students that took the Summative Assessment, the difference in achievement between students assigned to the ERWC and students assigned to the comparison course was not statistically significant.

In the impact analysis for the grade 11 sample for which the outcome measure was the Non-PT ICA, an ordinary least squares regression was estimated with the coefficient on the ERWC assignment variable (ITT) indicating that there was a positive and statistically significant impact of being assigned to the ERWC on student achievement as measured by the Non-PT ICA (see Table 6.8). The regression estimate indicates that students assigned to the ERWC had a theta score that was 0.129 higher, on average, than students assigned to the comparison course.



Table 6.8 Results for Students Who Took the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Characteristics	Coefficient	Standard Error	t-Statistic	p-Value
Assignment to ERWC	.129***	.047	2.75	.006
Age	064	.045	-1.42	.157
Female	.058	.046	1.25	.210
Asian	.194	.135	1.44	.152
Black or African American	087	.171	-0.51	.611
Hispanic	043	.074	-0.58	.561
Other	.012	.234	0.05	.959
Grade 8 Summative Assessment	.004***	.000	9.86	<.001
Fall 2020 FIAB	.003***	.000	8.87	<.001
Special Education Status	222**	.088	-2.52	.012
English Learner	004	.085	-0.04	.964
Constant	-15.806***	1.235	-12.79	<.001

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level. *Note*. The ethnicity group "Other" includes all race/ethnicity groups with sample sizes too small to be presented in the report. This category includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown race/ethnicity. FIAB refers to the Language and Vocabulary Use Focused Interim Assessment Block that students took during the fall of 2020. The race category White, non-Hispanic is used as the omitted race variable. The regression also included school indicator variables for each school, with one school variable being omitted. The school indicator dummy variable was equal to one if the student attended the school and zero otherwise. For brevity, the estimates for each of these school indicator variables are not reported here. Number of observations: 1,122

Source: Student data collected from the participating school districts; Non-PT ICA data collected from Cambium Assessment

The results of the impact analysis on the sample of students who took the Summative Assessment is presented in Table 6.9. For this outcome measure, there was not a statistically significant impact of being assigned to the ERWC.



Table 6.9 ERWC Impact Results for Students Who Took the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment

Characteristics	Coefficient	Standard Error	t-Statistic	p-Value
Assignment to ERWC	-5.001	4.424	-1.13	.259
Age	-6.645	3.773	-1.76	.078
Female	4.323	4.134	1.05	.296
Asian	41.035***	11.158	3.68	<.001
Black or African American	-2.634	11.346	-0.23	.816
Hispanic	2.654	6.614	0.4	.688
Other	17.638	10.659	1.65	.098
Grade 8 Summative Assessment	.161***	.021	7.83	<.001
Fall 2020 FIAB	.447***	.026	17.37	<.001
Special Education Status	-38.345***	7.495	-5.12	<.001
English Learner	-25.263***	7.101	-3.56	<.001
Constant	1128.583***	95.214	11.85	<.001

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level.

Note. The ethnicity group "Other" includes all race/ethnicity groups with sample sizes too small to be presented in the report. This category includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown race/ethnicity. FIAB refers to the Language and Vocabulary Use Focused Interim Assessment Block that students took during the fall of 2020. The race category White, non-Hispanic is used as the omitted race variable. The regression also included school indicator variables for each school, with one school variable being omitted. The school indicator dummy variable was equal to one if the student attended the school and zero otherwise. For brevity, the estimates for each of these school indicator variables are not reported here.

Number of observations: 1,855

Source: Student data and Summative Assessment scores collected from the participating school districts

In addition, a power analysis was conducted to calculate the minimum detectable effect size using the standard errors of the impact estimate found in tables 6.8 and 6.9. This power analysis can be found in Appendix L.

Estimated Effect Sizes

Table 6.10 shows the effect size as calculated using Hedges' g as the standardized mean difference between the treatment and comparison groups, a calculation that was done separately for the Non-PT ICA and the Summative Assessment samples. The calculation uses the adjusted mean difference taken from the regression analyses (see Tables 6.8 and 6.9). Hedges' g is the most commonly used method for calculating effect size on a continuous outcome (What Works Clearinghouse, 2020a, p. 14).



Table 6.10 Effect Sizes

Outcome Measure (Study Sample)	ERWC Mean (SD)	Comparison Mean (SD)	Pooled Within- Group Standard Deviation	Adjusted Mean Difference	Estimated Effect Size (Hedges' g)
Non-PT ICA (n = 1,122)	0.143 (0.895)	-0.054 (0.931)	0.915	0.129	0.141
Summative Assessment (n = 1,855)	2571.566 (111.696)	2564.085 (112.110)	111.914	-5.001	-0.045

Note. This table uses the Adjusted Mean Difference from the regression output to calculate the estimated effect size. Source: Student data and Summative Assessment scores collected from the participating school districts; Non-PT ICA data collected from Cambium Assessment

In addition to the main impact estimates presented here, a sensitivity analysis that only used observations with non-missing data was run for both study samples; the results of these sensitivity analyses were similar to the results shown in Tables 6.8 and 6.9 and can be found in Appendix L.

The significance levels for the coefficients for English learner and special education status in this chapter also prompted additional exploratory analyses investigating the effect of these variables in tandem with being assigned to the ERWC. These analyses used an Ordinary Least Squares regression with an interaction term and found no additional effect for being assigned to ERWC for English learner students or students in special education. The results from these analyses are also provided in Appendix L. Also included in Appendix L is an analysis that correlates ERWC students' achievement with whether their ERWC teacher reported teaching the required number of modules.

Grade 12 Impact Evaluation

This section reports on the methodology for the grade 12 impact evaluation and provides the results of the analysis.

Methodology for Grade 12 Impact Evaluation

The grade 12 evaluation used a quasi-experimental design (QED) to assess the impact of enrollment in the ERWC on student achievement. A randomized controlled trial (RCT) study was not possible for the grade 12 evaluation because students needed to be able to choose which English course they took in grade 12, as that choice could impact their English course options at the California State University (CSU) system in their freshman year of college if they



matriculated to the CSU.⁴⁰ As a result, the students could not be randomly assigned to treatment or comparison conditions, so a QED study was conducted in which students who took ERWC courses were matched with comparable students who took comparison English courses.

The methodology employed in this QED was a matching analysis (see, for instance, Rosenbaum & Rubin, 1983; Caliendo & Kopeinig, 2008; Steiner & Cook, 2013; Huber et al., 2013; Imbens, 2015). In the matching analysis, students who took two years of the ERWC (i.e., enrolled in ERWC in both grade 11 and grade 12) were matched to students who did not take the ERWC in either grade 11 or grade 12 (i.e., took zero years of the ERWC). The students who took two years of the ERWC are considered to be the treatment students in this grade 12 evaluation, and the students who took zero years of the ERWC are considered to be the comparison students.

Students in the treatment group were matched to comparison students based on the Mahalanobis distance metric, which is defined as the distance between two values of the covariate vector x and x':

$$||x,x'|| = (x-x')\Omega_x^{-1}(x-x')$$

where Ω_x is the sample covariance matrix of the covariates (see, for instance, Imbens, 2015). The matching was conducted using Stata statistical software with the teffects command.

In this analysis, "one-to-many" matches were conducted, whereby each treatment student was matched to the four most similar comparison students basedon observable characteristics. In addition, matching was done "with replacement," such that a comparison student could be matched to multiple treatment students if the comparison student was among the four closest matches to multiple treatment students. Treatment and comparison students from different school districts were also allowed to be matched together, given that all students in the analytic sample had the same standardized tests as their outcome measures (i.e., either the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment—the "Non-PT ICA"—or the Grade 11 Performance Task ELA/Literacy Interim Comprehensive Assessment—the "PT ICA"). In the impact analysis, two separate analyses were conducted, one with those students who took the Grade 11 Non-PT ICA as the outcome measure and the other with those students who took the Grade 11 PT ICA.

⁴⁰ In 2017 the CSU implemented Executive Order 1110 (EO 1110), which changed the process for how freshman students at the CSU were placed into Mathematics/Quantitative Reasoning and Written Communication (English) courses. EO 1110 implemented a multiple measures process whereby the entry level math and English courses that a student could enroll in as a freshman at the CSU depended upon the coursework the student had completed in high school and the grades the student had earned in those courses. More information about EO 1110 can be found online (accessed January 4, 2022): https://calstate.policystat.com/policy/6656541/latest/. In addition, as with the grade 11 impact evaluation, teachers were not able to be randomly assigned to teach either the ERWC or the comparison English curriculum. In terms of the level of education among the ERWC and the comparison English teachers, 65 (62 percent) of the 105 ERWC teachers had either a master's or doctoral degree; 9 (50 percent) of the 18 comparison English teachers had either a master's or doctoral degree.



To conduct the matching, the following student characteristics were used: female (yes/no), ethnicity (Hispanic, White, or Other), 41 English learner status (yes/no), special education status (yes/no), and the scale score on the Language and Vocabulary Use Focused Interim Assessment Block (FIAB) that was taken at the beginning of grade 11. The Language and Vocabulary Use FIAB was the baseline achievement measure used in this analysis. It consists of 15 questions that assess the Language and Vocabulary Use Target (Assessment Target #8) of the Writing Claim (Claim #2). Specifically, the Language and Vocabulary Use Target is the following: "Strategically use precise language and vocabulary (including academic and domain-specific vocabulary and figurative language) and style appropriate to the purpose and audience when revising or composing texts."42 This target assesses the following Common Core State Standards: Writing-2d (Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic), Writing-3d (Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters), and Language-6 (Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression).⁴³

⁴¹ The categories for ethnicity used in the grade 12 analysis differ slightly from the categories in the grade 11 analysis due to the difference in methodology used and the resulting small sample sizes. For the grade 12 analysis, it was necessary to combine more groups into the "Other" category due to some ethnicities being absent within a treatment or comparison condition, thus preventing matching on that ethnicity.

⁴² Refer to https://portal.smarterbalanced.org/library/en/appendix-b-grade-level-tables.pdf.

⁴³ The What Works Clearinghouse (WWC) Study Review Protocol (U.S. Department of Education, 2021) has an outcome domain for Vocabulary that is defined as: "Understanding the meanings of written English words using receptive vocabulary or expressive vocabulary, whether oral or written." Similarly, the Language-6 Common Core State Standards (CCSS) is to "Acquire and use accurately general academic and domain-specific words and phrases...." Given that both pertain to understanding vocabulary, the Language and Vocabulary Use FIAB assesses the Vocabulary domain from the Study Review Protocol. Moreover, the WWC Study Review Protocol also has an outcome domain for Writing Conventions that is defined as: "Using rules of standard English language, such as word usage...." Similarly, the Writing-3d CCSS is to "Use precise words and phrases." Because both pertain to using precise words, the Language and Vocabulary Use FIAB assesses the Writing Conventions outcome domain from the Study Review Protocol. Finally, for the Study Review Protocol, there is an outcome domain for General Literacy Achievement that is defined as: "Content in two or more distinct English literacy domains: Alphabetics, Reading Fluency, Vocabulary, Reading Comprehension, Writing Conventions, Writing Productivity, and Writing Quality." As a result, given that the Vocabulary domain and the Writing Conventions domain are both assessed on the Language and Vocabulary Use FIAB, the Language and Vocabulary Use FIAB appears to fall under the General Literacy Achievement domain. As such, the Language and Vocabulary Use FIAB can be the baseline achievement measure because it assesses General Literacy Achievement, which is also the domain assessed by the outcome measures (the Non-PT ICA and the PT ICA), as described later.



The treatment and the matched comparison students were then included in an Ordinary Least Squares (OLS) regression to assess the impact of enrollment in the ERWC. The same variables that were used to match treatment and comparison students were included in the regression model: gender, ethnicity, English Learner status, special education status, and FIAB scale score. The regression model was of the following form:

$$Y_i = \alpha + \beta_{1*}ERWC_i + \beta_{2}*Female_i + \beta_{3}*Ethnicity_i + \beta_{4}*Age_i + \beta_{5}*EL_i + \beta_{6}*SPED_i + \beta_{7}*Preachievement_i + \epsilon_i$$

where Y_i represents student i's achievement on the outcome measure (either the Non-PT ICA or the PT ICA); ERWC_i is a binary variable indicating enrollment for student i in the ERWC in both grades 11 and 12 (as compared to not enrolling in the ERWC in either of grades 11 or 12); Female_i is a binary variable identifying whether student i is female; Ethnicity_i is a vector of binary variables indicating student i's ethnicity (Hispanic, Other, or White, with White being the omitted variable in the regression); Age_i is the age of student i measured in years as of June 30, 2020; EL_i is a binary variable identifying whether or not student i is an English learner as of the end of the 2018/19 school year; SPED_i is a binary variable identifying whether student i received special education services in the 2018/19 school year; and Preachievement_i is the scale score of student i on the Language and Vocabulary Use FIAB administered in the fall of 2019. α is the intercept, β_1 - β_7 are parameters to be estimated from the data, and ε is the (assumed) independent and identically distributed error term. β_1 represents the average difference in the outcome measure between students who took two years of the ERWC compared to students who took zero years of the ERWC; this parameter represents the impact of two years of enrollment in the ERWC.

The OLS regression incorporated weights in the analysis to account for the fact that each treatment student was matched to four comparison students in the matching portion of the analysis. Because four comparison students were matched to each treatment student, each comparison student that was matched to a particular treatment student would receive a weight of 0.25 for that particular match, such that the sum of the weights of the four comparison students equals the weight of the one treatment student (where the treatment student receives a weight of 1.0). Moreover, because the matching was done with replacement, a comparison student's weight in the OLS regression was equal to 0.25 times however many instances that comparison student was matched to a treatment student. For instance, if a comparison student was matched to three treatment students during the matching phase, then that comparison student received a weight of 0.75 in the OLS regression. All of the treatment students always had a weight of 1.0 in the OLS regression. Moreover, to handle the fact that the weight of a comparison student could be 3.0, for instance, cluster-robust standard errors (Huber, 1967) were calculated at the student level in the OLS regression to allow for intragroup correlation at the student level.⁴⁴

⁴⁴ Cluster-robust standard errors could not be done at the teacher level because the intervention lasted two years, with students typically having two different English teachers over those two years.



Handling Missing Data

Students with missing data on any of the following variables had their data imputed in order to be included in the matching analysis and the OLS regression: gender, ethnicity/race, special education status, age, and English learner status. The imputation was conducted using the Stata command .mi impute chained. For missing values in gender, special education status, and English learner status, a logistic regression model was used to account for the binary nature of the variables. For race/ethnicity, a multinomial regression model was used to account for the categorical nature of the variable, while an ordered logistic regression was used for the age variable. Each missing value was replaced with one imputed value based on the regression model most suitable for the variable type. Students with missing outcome data or missing baseline test data were excluded from the analysis, and no outcome data or baseline test data were imputed in the analysis.

Outcome Measure for Grade 12 Impact Evaluation

Because grade 12 students in California and the state of Washington are not required to take an end-of-year standardized assessment, the WestEd study team contracted with Cambium Assessment to set up a testing system that allowed study students to take the Grade 11 ELA/Literacy ICA. The Grade 11 ELA/Literacy ICA was an appropriate assessment to administer to the grade 12 students because the Common Core State Standards use two-year grade bands in grades 9–12 (Common Core State Standards Initiative, 2010). This ELA/Literacy ICA consisted of a Performance Task (PT) section and a Non-Performance Task (Non-PT) section; each section takes approximately two hours for a student to complete.

Given that the assessment was administered during the pandemic in the spring of 2021, when many schools were still operating in distance learning, schools were unwilling to administer a four-hour test comprising both the PT and the Non-PT sections of the ELA/Literacy ICA. As a result, schools were instructed to administer either the PT section or the Non-PT section of the ELA/Literacy ICA. In total, 25 schools administered the PT ICA and 27 schools administered the Non-PT ICA. Some schools in the study sample administered both the PT ICA and the Non-PT ICA.

The Non-PT ICA consists of 38 questions, with all but three of those questions being machine-scored. The Non-PT ICA assesses all four claims: Reading (Literary and Informational), Writing, Listening, and Research. Within Claim #1 (Reading Literary and Reading Informational), the following Assessment Targets are assessed: 1. Key Details (Literary), 2. Central Ideas (Literary), 4. Reasoning and Evidence (Literary), 5. Analysis Within or Across Texts (Literary), 8. Key Details (Informational), 9. Central Ideas (Informational), 10. Word Meanings (Informational), 11. Reasoning and Evidence (Informational), and 14. Language Use (Informational). Within Claim #2 (Writing), the following Assessment Targets are tested: 3a (Write Brief Texts (Explanatory)), 6b (Revise Brief Texts (Argumentative)), 8 (Language and Vocabulary Use), and

⁴⁵ The ELA/Literacy ICA Blueprint (as of August 2020, which was the assessment taken by the students in this evaluation), can be found online (accessed on February 17, 2022): https://portal.smarterbalanced.org/library/en/ela-literacy-interim-comprehensive-assessment-blueprint.pdf



9 (Edit).⁴⁶ Within Claim #3 (Listening), the following Assessment Target is tested: 4 (Listen/Interpret). Finally, within Claim #4 (Research), the following Assessment Targets are tested: 2 (Interpret and Integrate Information), 3 (Analyze Information/Sources), and 4 (Use Evidence).

The PT ICA assesses two claims: Writing and Research. From the Writing claim, the following Assessment Target is assessed: 4. Compose Full Texts—Explanatory. From the Research claim, the following Assessment Target is assessed: 4. Use Evidence. For the impact analysis, the raw score was used to measure achievement on the PT ICA.

Scoring the English Language Arts Interim Comprehensive Assessment

WestEd contracted Cambium Assessment to use Cambium's automated essay scoring to score the Non-PT ICA and PT ICA. There were five hand-scored items on these assessments, all of which asked students to generate extended responses: The Non-PT ICA contained three short answer items, and the PT ICA contained one short answer item and one full write item. Three short answer items and the full write item were scored using Cambium's automated scoring system, and one short answer item was human scored.⁴⁷

Table 6.11 summarizes the inter-rater reliability estimate for non-multiple choice/non-multiple select items (three short answer items in the Non-PT and one short answer item and one full write item in the PT). The correlation was calculated between Cambium's automated essay scoring machine and a human rater, or between two human raters for the item that was not scored by Cambium's automated scoring machine.

Table 6.11 Inter-Rater Reliability

Item Type	Item Number	Correlation	Number of Students	
Short Answer	11	0.51	1,504	
Short Answer	14	0.85	822	
Short Answer	21	0.64	1,177	
Performance Task 1	39	0.51	1,504	
Performance Task 2	40 (Conventions)	0.61	778	
Performance Task 2	40 (Elaboration)	0.77	778	
Performance Task 2	40 (Organization)	0.80	778	

Source: Interim Comprehensive Assessment scores collected from Cambium Assessment

⁴⁶ The Assessment Target #8 (Language and Vocabulary Use) from Claim #2 (Writing) is assessed in the Non-PT section, and this Assessment Target was also used as the baseline achievement measure through the Language and Vocabulary Use FIAB.

⁴⁷ The reason that Cambium's automated scoring system could not score one of the short answer items is because the machine had not been trained on that particular item.



For the Non-PT ICA, each student's achievement was measured using a theta score. The theta score was calculated using Item Response Theory (IRT). The IRT estimates were based on the first 38 items that mix 35 multiple choice/multiple select items with three short answer items. Consistent with how the scoring was done for the complete Summative Assessment used in the grade 11 RCT, a two-parameter logistic (2PL) model was used for the multiple choice/multiple select items and a generalized partial credit (GPC) model was used for the short answer items. This combination of 2PL and GPC models was used to generate the theta scores. ⁴⁸ The theta estimates range from -3.00 to +3.00 (with higher numbers indicating higher achieving students) and had a mean of 0.00 and a standard deviation of 1.00. The theta score was used as the outcome measure for the study sample that took the Non-PT ICA.

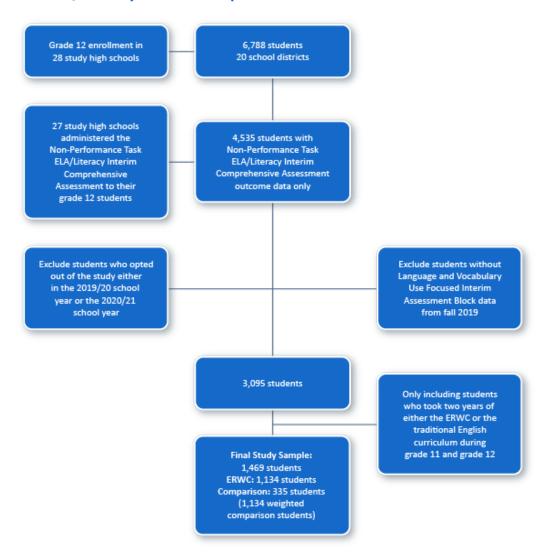
Data Included in the Analysis for the Grade 12 Impact Evaluation

Figures 6.3 and 6.4 are consort diagrams that describe how the samples for both analyses were formed.

⁴⁸ Because it is unknown how the ERWC intervention impacted the treatment group, only the comparison students were included in the initial IRT estimation that yielded both the item parameter estimates for all 38 items and the theta estimates for the comparison students. The resulting item parameter estimates were then applied to estimate the theta scores for both the treatment group and the comparison group.



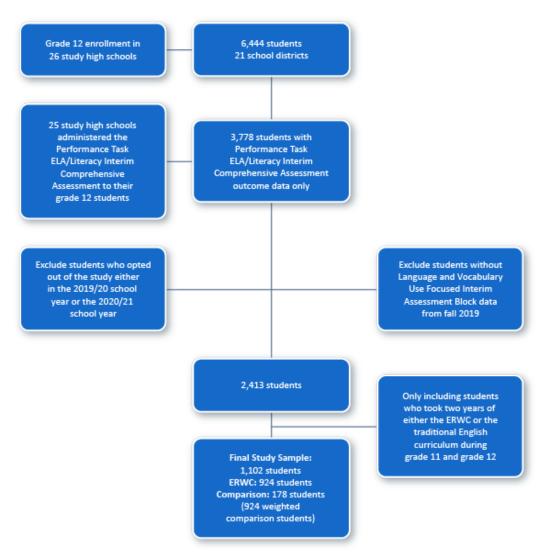
Figure 6.3 Consort Diagram for Grade 12 Students Who Took the Non-Performance Task ELA/Literacy Interim Comprehensive Assessment



Note. One study high school did not administer the outcome assessment test to students in grade 12. An additional two study high schools did administer the outcome assessment but were excluded from the final study sample due to no remaining students after implementing the remaining of the exclusion criteria (students opting out, students without Language and Vocabulary Use FIAB data from fall 2019, and students without two years of either the ERWC or the comparison curriculum). The final sample for students with Non-PT ICA data consists of 25 study high schools. Five schools overlap for both assessment outcomes; however, there is no student overlap across the two assessments. In three schools, there were some ERWC classrooms in which some of the ERWC students took both the Non-PT and the PT portions of the ELA/Literacy Interim Comprehensive Assessment. Because only ERWC students took the full test (84 students in total), and because these students ended up taking a full four-hour test as compared to the other students who only took a two-hour test, students who took the four-hour test were excluded from the analysis to prevent any bias that is introduced by those students spending twice as much time taking the test. No schools were excluded from the final study sample because of this decision.



Figure 6.4 Consort Diagram for Grade 12 Students Who Took the Performance Task ELA/Literacy Interim Comprehensive Assessment



Note. One study high school did not administer the outcome assessment test to students in grade 12. An additional three study high schools did administer the outcome assessment but were excluded from the final study sample due to no remaining students after implementing the remaining exclusion criteria (students opting out, students without Language and Vocabulary Use FIAB data from fall 2019, and students without two years of either the ERWC or the comparison curriculum). The final sample for students with PT ICA data consists of 22 study high schools. Five schools overlap for both assessment outcomes; however, there is no student overlap across the two assessments. In three schools there were some ERWC classrooms in which some of the ERWC students took both the Non-PT and the PT portions of the ELA/Literacy Interim Comprehensive Assessment. Because only ERWC students took the full test (84 students in total), and because these students ended up taking a full four-hour test as compared to the other students who only took a two-hour test, students who took the four-hour test were excluded from the analysis to prevent any bias that is introduced by those students spending twice as much time taking the test. No schools were excluded from the final study sample because of this decision. Source: Student data collected from participating high schools or districts; PT ICA data collected from Cambium Assessment



Baseline Equivalence for Grade 12 Impact Evaluation

Baseline equivalence was assessed for both study samples (i.e., the Non-PT ICA and the PT ICA) and are reported in the following tables. The tables report on the results after single imputation for missing data and the one-to-four matching between treatment and comparison students with replacement was conducted. No values were imputed for the FIAB scores as the analytic sample excluded students without an FIAB score.



Table 6.12 Baseline Balance, After Matching Was Conducted, for Students Who Took the Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Student Characteristics	ERWC Students	Percentage	Comparison Students	Percentage				
Gender								
Male	619	55%	646.25	57%				
Female	515	45%	487.75	43%				
Ethnicity								
Hispanic	815	72%	828	73%				
White	203	18%	191.75	17%				
Other	116	10%	114.25	10%				
Age								
16	403	36%	373.75	33%				
17	707	62%	744.5	66%				
18	24	2%	15.75	1%				
English Learner								
Yes	105	9%	100.25	9%				
No	1,029	91%	1,033.75	91%				
Special education	Special education							
Yes	85	8%	81.25	7%				
No	1,049	92%	1,052.75	93%				
Total	1,134		1,134					

Note. Data displayed include imputed values using a regression model to impute a single value. The number of comparison students is weighted based on how many times each comparison student was matched to an ERWC student. The ethnicity group "Other" includes all race/ethnicity groups with sample sizes too small to be presented in the report. The category includes American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown race/ethnicity. Age is based on date of birth and is defined as age in years as of June 30, 2020. Source: Student data collected from participating school districts



Table 6.13 Baseline Balance, After Matching Was Conducted, for Students Who Took the Performance Task ELA/Literacy Interim Comprehensive Assessment

Student Characteristics	ERWC Students	Percentage	Comparison Students	Percentage			
Gender							
Male	512	55%	534	58%			
Female	412	45%	390	42%			
Ethnicity							
Hispanic	578	63%	611.25	66%			
White	242	26%	218.75	24%			
Other	104	11%	94	10%			
Age							
16	323	35%	343.25	37%			
17	568	61%	546.75	59%			
18	33	4%	34	4%			
English Learner							
Yes	50	5%	49.75	5%			
No	874	95%	874.25	95%			
Special education							
Yes	98	11%	80.25	9%			
No	826	89%	843.75	91%			
Total	924		924				

Note. Data displayed include imputed values using a regression model to impute a single value. The number of comparison students is weighted based on how many times each comparison student was matched to an ERWC student. The ethnicity group "Other" includes all race/ethnicity groups with sample sizes too small to be presented in the report. The category includes American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown race/ethnicity. Age is based on date of birth and is defined as age in years as of June 30, 2020. Source: Student data collected from participating school districts



Table 6.14 presents the results of the baseline equivalence testing for the Language and Vocabulary Use FIAB administered in the fall of 2019. The baseline calculation was done separately for students who took the Non-PT ICA and PT ICA. Using the Hedges' g (Wolf et al., 2017), each baseline mean difference is given as a standardized number, making it comparable to the WWC threshold for baseline equivalence. The absolute effect size difference yielded a value below .25 for students who took the PT ICA and a value below .05 for students who took the Non-PT ICA. To increase the precision of the regression estimates in both of the final analyses, researchers controlled for the Language and Vocabulary Use FIAB score.

Table 6.14 Baseline Equivalence on the Pre-Achievement Measure—the Language and Vocabulary Use Focused Interim Assessment Block From Fall 2019

Analytic Sample	Language and Vocabulary Use FIAB Scores for ERWC Students Mean (Standard Deviation)	Language and Vocabulary Use FIAB Scores for Comparison Students Mean (Standard Deviation)	Standardized Mean Difference (Hedges' g)
Non-PT ICA (n = 1,134)			0.009
PT ICA (n = 924)			0.062

Note. The number of comparison students is weighted based upon how many times each comparison student was matched to a treatment student. The FIAB mean for the treatment students was calculated using the observed mean for comparison students plus the regression model estimate from running a linear regression model using FIAB as the dependent variable and ERWC status as an independent variable.

Source: Student data collected from participating school districts

Impact Results for Grade 12

Two separate impact analyses were conducted—one for students who took the Non-PT ICA, and one for students who took the PT ICA. The two samples for the different outcome measures were treated as two separate analyses with independent results. As Table 6.15 and Table 6.16 show, the coefficient on enrollment in the ERWC was not statistically significant for either of the two analyses. Additional sensitivity analyses were conducted—including a complete case analysis and a one-to-one matching without replacement; the results for these analyses can be found in Appendix L. Both sensitivity analyses done for both study samples

⁴⁹ A decision was made to exclude the grade 8 Smarter Balanced ELA/Literacy Summative Assessment score as a baseline measure due to the decrease in sample size it would have caused by excluding students without this score. Among students that took the Non-PT ICA, 470 students did not have a grade 8 Smarter Balanced ELA/Literacy Summative Assessment score. Among students who took the PT ICA, 311 students did not have a grade 8 Smarter Balanced ELA/Literacy Summative Assessment score.



showed no difference in results compared to the main analyses shown in Tables 6.15 and 6.16. In addition, a power analysis for the grade 12 analysis can be found in Appendix L.

Table 6.15 Regression Analysis Results for the Sample of Students Who Took the Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Variables	Coefficient	Robust Standard Error	t-Statistic	p-Value
ERWC enrollment	-0.004	.060	-0.06	.948
Age	-0.071	.058	-1.23	.219
Female	.108	.062	1.76	.079
Hispanic	-0.121	.068	-1.78	.075
Other	-0.092	.087	-1.06	.291
English Learner	-0.306***	.081	-3.76	<.001
Special Education	-0.369***	.086	-4.32	<.001
Fall 2019 FIAB Scale Score	.003***	.000	11.97	<.001
Constant	-6.656***	1.241	-5.36	<.001

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level. *Note.* The ethnicity group "Other" includes all ethnicity/race groups with sample sizes too small to be presented in the report. The category includes American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown. Age is the age in years as of June 30, 2020. Race category White, non-Hispanic is used as the omitted race variable in the regression. FIAB refers to the Language and Vocabulary Use Focused Interim Assessment Block that students took in the fall of 2019. The regression analysis uses cluster-robust standard errors at the student level.

Number of observations: 1,469

Source: Student data collected from participating school districts; Non-PT ICA scores collected from Cambium Assessment



Table 6.16 Regression Analysis Results for the Sample of Students Who Took the Performance Task ELA/Literacy Interim Comprehensive Assessment

Variables	Coefficient	Robust Standard Error	t-Statistic	p-Value
ERWC enrollment	.339	.215	1.58	.114
Age	-0.212	.182	-1.17	.243
Female	.071	.211	0.33	.738
Hispanic	.447	.303	1.48	.140
Other	.543	.411	1.32	.187
English Learner	arner -0.237 .238		-1.00	.319
Special Education	-0.607	.355	-1.71	.088
Fall 2019 FIAB Scale Score	.004***	.001	4.10	<.001
Constant	-2.241	3.906	-0.57	.566

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level.

Note. The ethnicity group "Other" includes all ethnicity/race groups with sample sizes too small to be presented in the report. The category includes American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and Two or More/Unknown. Age is the age in years as of June 30, 2020. Race category White, non-Hispanic is used as the omitted race variable in the regression. FIAB refers to the Language and Vocabulary Use Focused Interim Assessment Block that students took in the fall of 2019. The regression analysis uses cluster-robust standard errors at the student level.

Number of observations: 1,102

Source: Student data collected from participating school districts; PT ICA scores collected from Cambium Assessment

Estimated Effect Size

Table 6.17 shows the calculated effect size using Hedges' g as the standardized mean difference between the treatment and comparison groups separately for the Non-PT ICA and the PT ICA. The calculation uses the ERWC enrollment estimate coefficient from Tables 6.15 and 6.16 as the adjusted mean difference.



Table 6.17 Effect Size

Analytic Sample	ERWC Mean (SD)	Comparison Mean (SD)	Pooled Within- Group Standard Deviation	Adjusted Mean Difference	Estimated Effect Size
Non-PT ICA (n = 1,134)	0.006 (0.919)	0.010 (0.896)	0.907	-0.004	0.004
PT ICA (n = 924)	3.817 (2.013)	3.478 (2.008)	2.011	0.339	0.168

Note. The estimated effect size is calculated using the adjusted mean difference between treatment and comparison students. Adjusted mean difference is the difference between the treatment and comparison students after controlling for all the covariates included in the main analysis.

Source: Student data collected from participating school districts; Interim Comprehensive Assessment data collected from Cambium Assessment



7. Cost Analysis

WestEd conducted a cost analysis to estimate the resources required to develop and implement the ERWC. This cost analysis captures the costs of this specific version of the ERWC in order to understand the use of resources for the current design and to inform possible future implementation of the ERWC.

Methods and Data Sources

The ingredients method (Institute of Education Sciences, 2020) was the primary method of cost analysis. The ingredients method is a common framework for conducting an evaluation of costs, either during an intervention or as part of an evaluation period. Researchers first identify the ingredients of an intervention—all the necessary resources, from books and materials to staff time to "hidden" resources such as staff work outside of contract/regular work hours. For every ingredient, a quantity is estimated, an appropriate market price is assumed, ⁵⁰ and an estimated total cost is calculated as the product of quantity and price. Throughout this study's cost analysis, the source of the prices and the assumptions for important calculations are described.

The cost analysis used the following data sources to determine market prices:

- CostOut (Hollands et al., 2015)—a database, created by Columbia University Teachers'
 College, providing common education-related costs—for the following market prices:
 - Classroom, school office, and school auditorium space
 - Salary amounts for all positions
 - Lodging nightly rates for trips
 - Mileage rates for trips
- Bureau of Transportation Statistics (2021) for airline rates for trips
- Wilson & Zamora (2022) for web hosting fees
- Tare & Brown (2019) for teacher benefits (CostOut does not include teacher benefits for this position)

⁵⁰ A market price is the value that a good or service would fetch under current economic conditions. In this study, these prices are national averages, obtained and calculated by government or industry sources.



The cost analysis used the following data sources to determine **observed prices**:

- The CSU's purchase records and other accounting documents (C. Morena-Donato, personal communications, October 20—December 13, 2021) for observed prices of the following costs:
 - Website developer contract
 - Module copyright costs
 - Module formatting costs
 - Coach and site lead stipends
 - Module writer stipends
 - Summer Institute facilitator stipends
 - Summer Institute binder and participant materials, food, and audiovisual prices
 - Book prices from national online book retailer

The cost analysis used the following data sources to determine quantities and full-time equivalents (FTEs):

- Interviews with ERWC leaders and Steering Committee members for the time required for each development and implementation activity (see the Time Estimates section for more information about the interviews):
 - Interviews with administrative coordinators, the CAR/W co-directors, and members of the Steering Committee in September and October 2021 for data on average hours to develop a full or mini-module or to substantially revise a module
 - C. Street, personal communication, October 18, 2021, for hours for website design and maintenance
 - Interviews with FCSS staff in October 2021 to obtain estimates of their time
 - L. Sibel, personal communication, November 8, 2021, for FCSS records regarding travel for school recruitment
- Interviews with ERWC and comparison teachers in September and October 2021 to determine the impact of the ERWC and the comparison curriculum on non-classroom teacher time
- Summer Institute attendee records maintained by WestEd for the following information:
 - Counts of attendees to calculate food and binder costs
 - The number of teachers who were provided hotel rooms to attend the Summer Institute



- The facilitators for each Institute, including their home location for the Summer Institute facilitator travel

Identifying Key Ingredients

To enumerate all the ingredients, WestEd researchers started with the ERWC theory of action (see Figure 2.1 earlier in this report) and identified the resources necessary for implementing it. This process led to the set of resource categories and ingredients in Table 7.1.

Table 7.1 Resource Categories Included in the Cost Analysis

Resource Category	ERWC Development (January 2017– June 2018)	velopment Pilot Year 1 (July 2018– uary 2017– June 2019)		Evaluation Year (July 2020– June 2021)
Personnel				
CAR/W Co-Director	Included	Included	Included	Included
Steering Committee	Included	Included	Included	Included
Module Writers/Editors	ditors		N/A	N/A
Website	N/A	Included	Included	Included
Summer Institute Facilitators	Included	Included	Included	Included
Coaches	N/A	Included	Included	Included
Site Leads	N/A	Included	Included	Included
FCSS Curriculum Development Staff	Included	Included	Included	Included
Administrative Support Staff (CSU and FCSS)	Included	Included	Included	Included



Resource Category	ERWC Development (January 2017– June 2018)	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)
Facilities				
Summer Institute	Included	Included	Included	Included
Coaching Meeting Space	N/A	Included	Included	Included
Steering Committee Meeting Space	Included	Included Included		Included
Materials				
Books	N/A	Included	Included	Included
Travel				
Miscellaneous	Included	Included	Included	Included
Development/School Visits	Included	N/A	N/A	N/A
Steering Committee	Included	Included	Included	Included
Summer Institute	Included	Included	Included	Included

Note. "N/A" indicates not applicable. "Included" means the cost occurred in that year.

As is true for most education activities, labor is a critical ingredient; it is the largest ingredient in terms of its importance to the curriculum, and it is the most expensive resource cost. For more information on the personnel roles, see the introductory sections of this report.

Defining the Comparison Group

The comparison group for the cost analysis is the same as the comparison group for the impact evaluation: a business-as-usual (BAU) English 11 or 12 classroom using a comparison curriculum. This comparison curriculum actually encompasses a wide range of instructional practices, including schoolwide purchased curricula from several major curriculum providers, and teacher-designed lesson plans, or some combination of the two (see the Description of the Comparison Course section earlier in this report). These comparison classrooms are similar in all



other respects (student demographics, class sizes, school characteristics, etc.) except for the ERWC resources listed in Table 7.1, which are to varying extents additional—or "incremental"⁵¹—to what is needed for providing the comparison English courses.

Key Assumptions

To streamline the cost data collection process and make the resource categories more transparent for application in other contexts, researchers made key assumptions in this cost analysis process for time estimates, market price identification, and prices, as detailed in the following sections.

Time Estimates

WestEd researchers conducted interviews with members of the ERWC Steering Committee, FCSS staff, and a sample of study teachers to gather information on staff time required for each activity.

- **ERWC and comparison teachers** provided time estimates for planning and grading activities outside of school classroom time.
- **ERWC Steering Committee members** provided time estimates for curriculum development, teacher training, module writing and revision, and website development and maintenance.
- FCSS staff provided time estimates for curriculum development, training, and coaching activities.

To collect information on prices and quantities, WestEd researchers conducted interviews over video conference in September and October 2021.

WestEd researchers interviewed seven comparison and seven ERWC teachers. Teachers were selected based on their willingness to meet with researchers. Interviewers asked the teachers about the different kinds of activities they performed outside of the classroom—including planning, grading, and communicating with students and families—and asked for estimates of the time required to perform these activities. These estimates, which were converted into hours per-section per-week averages for each activity, were used for exploratory analysis of ERWC teacher time, as teacher time is not incorporated in the cost estimates in this report.

WestEd researchers interviewed two CAR/W co-directors, the ERWC coordinator from FCSS, administrative staff from the CSU and FCSS (one from each), and one Steering Committee member. These individuals were selected based on their knowledge of their specific roles. WestEd researchers asked questions about the nature and duration of various activities in order

⁵¹ Some costs, such as coaching time, are fully incremental to those of the comparison English courses—meaning these costs are only for the ERWC and are not part of implementing the comparison courses. Other costs are partially substituting—meaning they represent a change in personnel effort relative to the comparison course. One example of such a cost is outside-of-classroom teacher time for planning and grading, which is a resource cost for both the comparison and the ERWC course.



to understand the appropriate price and time required for each position. Based on this information, WestEd researchers chose a position description from CostOut that best aligned with the role and assigned an FTE.

The amount of time for each activity varied widely across respondents. This wide range of time estimates has implications for costs. Outlier time estimates may skew the cost estimates, making the ERWC appear significantly cheaper or more expensive, especially for module development, for which the time estimates varied greatly based on the difficulty of the module text, revisions required, and staff capacity and skill. Based on these interviews and the WestEd research team's reasonable assessment of time required for these activities, researchers estimated *average* hours per activity. These estimates do not necessarily reflect the amount of time it took each person to complete the specific task but rather the typical time required to implement and develop the ERWC. For selected cases, researchers conducted sensitivity analyses to show cost estimates for the lower and upper bounds of time estimates.

Market Price Identification

For many staff roles, the research team had to select an associated hourly rate. Researchers used a market price—the price that the role would fetch in the free market outside of this curriculum implementation. To identify these prices, researchers first defined the responsibilities and qualifications necessary for each role, then matched those with an associated position description in CostOut, as detailed in Table 7.2 (Hollands et al., 2015).



Table 7.2 ERWC Roles and Associated Professional Responsibilities

	Associated Position Salary Category	Summer Institute Leader	Coach	Site Lead	Thought Leadership/ Curriculum Design	Curriculum Management	Website	Module Development	Steering Committee
Basic ERWC Leader	Teacher, 6–9 Years of Experience	Yes	Yes	Yes	N/A	N/A	N/A	Yes	N/A
Advanced ERWC Leader	Full Professor at Doctoral University	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes
Curriculum Management/ Program Leader	Full Professor at Doctoral University	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FCSS District Leaders	Chief of Elementary and Secondary Education or Instructional Coordinator	Yes	Yes	Yes	Yes	N/A	N/A	N/A	Yes
Administrative Support	Administrative Assistant	N/A	N/A	N/A	N/A	Yes	N/A	N/A	N/A
Web Developer	Web Developer	N/A	N/A	N/A	N/A	N/A	Yes	N/A	N/A

Note. "N/A" indicates not applicable. "Yes" indicates this role performed the activity associated with the column.



Prices

Market prices are based on national figures gathered from CostOut. Where market prices are reported, researchers used national prices (see below for regional adjustments to certain costs). All prices are adjusted for inflation to the 2020/21 school year, which is the final year of this study.⁵² All prices are also discounted at a 3-percent rate to reflect the present value of the good. The discount adjustment modifies the costs to reflect the time value of money, assuming that deferred costs (money spent later in the intervention) can be invested until they are used and thus goods purchased later are less costly (Levin & McEwan, 2000).

In addition, the Comparable Wage Index (CWI) for Teachers—a national measure of regional variation in the price of teachers—was used to convert national personnel prices to reflect state-specific economic conditions (Cornman et. al, 2019). Costs for Steering Committee members, facilitators, and curriculum development staff were adjusted using the California CWI. The cost of site leads and coaches were adjusted using a combination of the California and Washing CWIs proportionately by the number of schools in each state. Additionally, school facilities (for coaching and Steering Committee meeting spaces) were adjusted with the Regional Price Parity to reflect regional variations in the price of facilities (U.S. Bureau of Economic Analysis, 2021). National prices are approximately 16 percent lower than the reported adjusted figures. To keep the main text in the cost analysis sections brief, footnotes provide more detailed explanations for some of the cost calculations.

Estimated Program Costs

The research team estimates the total *incremental* cost⁵³ of the ERWC 3.0 program for years 2017 through 2021 to be about \$4.2 million. Although supported by documentation and interviews, this is an *estimated cost*, and there is some uncertainty due to the difficultly of identifying proper prices and quantities. A sensitivity analysis (see the Sensitivity Analysis section later in this report) explores some of this uncertainty and describes the cost implications of different estimates.

The costs reported throughout the current section capture the additional resources required to develop and implement the ERWC, when compared with the comparison curriculum. This amount does not include the value of participating teacher time (e.g., time spent teaching the course, time spent preparing to teach the course, time spent grading papers, and so on). Incremental teacher time for ERWC teachers is not included due to the high uncertainty regarding this ingredient. The research team has suggestive but limited evidence that participating ERWC teachers spend less time planning and grading than comparison teachers, but researchers are hesitant to extrapolate these results to estimate incremental costs due to small sample size and large variability. A more thorough description of teacher time and its

⁵² Annual inflation metrics were adjusted to reflect a July-to-June year to mirror the school years/study years.

⁵³ Incremental cost is "the difference in cost between the treatment and control conditions" (American Institutes for Research, 2021, p. 8). It does not include costs that are common to both the treatment and control (such as classroom space).



implications can be found below in the Personnel subsection of the ERWC 3.0 School Site Implementation Costs section. In addition, fees paid by districts to purchase the comparison curriculum are not included, due to the lack of data available to the researchers.

The majority of costs are for the personnel required for development and implementation of the ERWC. Significant investment takes place in the development stage. It is possible some of the development costs would not transfer to another implementation. For example, if the same modules are used in a future implementation, then that implementation would not need to invest in module development. Personnel costs are a significant portion of total costs in the implementation period, requiring payment for site leads and coaches. In contrast, materials costs were modest. The total incremental cost for the ERWC 3.0 (including for development) was estimated to be approximately \$279 per student over the course of the development and implementation, or about \$62 annually over the four years of this evaluation. ⁵⁴ To put this amount in context of overall spending, average per-pupil spending in California was \$14,053 in fiscal year 2020 (United States Census Bureau, 2021).

This report does not compare the ERWC's total estimated cost with the price of other English language arts curricula and learning materials because the development and implementation of commercial curricula are likely very different (especially because they are rolled out over more time and for more students), and therefore this sort of cost comparison is not advisable without gathering additional information about comparison curricula.

Table 7.3 shows how the costs of the ERWC are spread among different components; the costs are detailed in the sections that follow.

⁵⁴ This figure is an estimate: It is the total cost (including for development) divided by the number of students participating in this iteration of the ERWC (15,000).



Table 7.3 Summary of ERWC Costs by Resource Category

	ERWC Development (January 2017 –June 2018)	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
Program Management and Development	\$560,834	\$520,054	\$410,193	\$357,469	\$1,848,550
Module Writing	\$704,117	N/A	N/A	N/A	\$704,117
Website	N/A	N/A	\$57,873	\$97,654	\$155,527
Summer Institute	N/A	\$185,971	\$142,891	\$51,565	\$380,426
School Site Resources	N/A	\$506,181	\$302,379	\$292,951	\$1,101,511
Total	\$1,264,950	\$1,212,206	\$913,336	\$799,639	\$4,190,131

Note. "N/A" indicates not applicable. See Tables 7.5–7.13 for more detailed breakdowns, including by resource and source. Due to rounding, numbers may not sum exactly.

Source: Authors' calculations

Personnel performed both development and implementation activities, and the proportion of time for each of these categories evolved as the ERWC moved from development into implementation in schools. Before the first Summer Institute in 2018, the personnel roles of the CAR/W co-director, administrative support from the CSU and FCSS, FCSS staff, and Steering Committee members are considered fully development roles. In Pilot Year 1, implementation began, but some development activities continued. By Pilot Year 2, these activities had largely shifted to implementation activities, with the exception of website development activities. Table 7.4 shows the percentages of costs associated with development and implementation in each time period.



Table 7.4 Percentage Breakdown by ERWC Development and Implementation Costs

	ERWC Development (January 2017– June 2018)	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
ERWC 3.0 Development Costs	100%	32%	37%	34%	54%
ERWC 3.0 Implementation Costs	0%	68%	63%	66%	46%

Note. See Tables 7.5–7.13 for more detailed breakdowns, including by resource and by source. Source: Authors' calculations

Some assumptions were made to divide activities between development and implementation. The following activities were considered to be fully associated with development (with the exception of website development, these activities concluded after the first two time periods):

- Module development
- Website development
- Recruitment travel

Some costs were fully associated with implementation, including the following:

- Site leads and coaches
- Coaching spaces
- Website maintenance
- Summer Institutes
- Books

In the ERWC 3.0 development period of January 2017 through June 2018, all personnel costs were development.

For Pilot Year 1 (July 2018 through June 2019), the following cost components were split between development and implementation:

- The CAR/W co-director and the CSU administrative support (50% development and 50% implementation)
- The FCSS staff (the district administrator was 90% implementation and 10% development; the instructional coordinator was 75% implementation and 25% development)



• FCSS administrative support (82.5% implementation and 17.5% development)

All of these roles shifted to 100 percent implementation in the final two study periods (Pilot Year 2 and the Evaluation Year).

Estimated Costs by Resource Component

ERWC 3.0 Non-School Site Development and Implementation Costs

The first category of costs and a key program component of ERWC 3.0 is non—school site development and implementation costs. This category includes all resources dedicated to the development of the ERWC 3.0, primarily leveraged in the first 18 months of the period from January 2017 through June 2018. It also includes key resources such as administration personnel, module writers and editors, and ERWC Steering Committee members. Table 7.9 summarizes the estimated costs for key subcategories of resources in this component. Each resource category is detailed in a table (see Tables 7.5–7.8) and aligns to a row in the summary Table 7.9. These are estimated costs, and assumptions or sources of uncertainty are detailed for ingredients where necessary.

Curriculum Management and Development Costs

These costs include resources dedicated to management and overall development activities. Table 7.5 summarizes these estimated costs by specific ingredients.



Table 7.5 Summary of Estimated Curriculum Management and Development Costs

	ERWC Development (January 2017 –June 2018)	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
CAR/W Co-Director	\$182,664	\$175,597	\$85,241	\$24,827	\$468,329
CAR/W Co-Director Travel	\$695	\$0	N/A	N/A	\$695
Steering Committee	\$46,368	\$44,575	\$43,276	\$66,843	\$201,062
Steering Committee Travel	\$16,631	\$15,394	\$7,473	N/A	\$39,498
Steering Committee Meeting Space	\$925	\$889	\$431	N/A	\$2,245
Administrative Support	\$72,630	\$69,820	\$67,786	\$65,812	\$276,047
FCSS Staff	\$236,451	\$212,166	\$205,986	\$199,987	\$854,589
FCSS Development Travel	\$4,470	\$1,615	N/A	N/A	\$6,084
Total	\$560,834	\$520,054	\$410,193	\$357,469	\$1,848,550

Note. "N/A" indicates not applicable. Steering Committee meeting space in Pilot Year 2 reflects half a year of virtual meetings that were a result of the pandemic. Due to rounding, numbers may not sum exactly.

Source: Authors' calculations based on records of ERWC management and development staff time and travel (N. Brynelson, personal communication, October 19 and 21, 2021; C. Street, personal communication, October 18, 2021; L. Benham and L. Sibel, personal communication, October 26, 2021; L. Sibel, personal communication, November 8, 2021); salary, mileage, and lodging rates adjusted from CostOut (Hollands et al, 2015); flight mileage price from Bureau of Transportation Statistics (2021)

The development and implementation of the ERWC was overseen by four core team members: three personnel from FCSS (a director, administrator, and instruction coordinator) and one individual from the CAR/W.⁵⁵ Interviewees reported that these team members often worked for more than 40 hours per week; however, this report assumes each individual is only working at most 40 hours a week, or a 1.0 FTE role—a reasonable lower bound. For future implementations, the potentially higher workload for these roles should be kept in mind.

⁵⁵ For more information, see https://www.calstate.edu/impact-of-the-csu/teacher-education/CARW



For the FCSS director and the FCSS administrator, 100 percent of their time was dedicated to the development and implementation of the ERWC. Therefore, their salaries are fully attributed as a cost of the ERWC. FTEs for the other positions varied. The CAR/W co-director had substantial development and management responsibilities for this iteration of the ERWC. This role was 1.0 FTE in the first two time periods and then decreased. The FCSS instructional coordinator spent 80 percent of their time on the development and implementation of the ERWC, which translates to 0.80 FTE in the estimates used in this study. The administrator at the CSU Chancellor's office had other assignments, and their time working on the ERWC is estimated at 0.50 FTE for each year of the study.

In addition, these core leaders played many roles, and their ability to take on different types of tasks was certainly integral to the development and implementation of the ERWC. For example, the CAR/W co-director contributed to the following activities:

- Thought leadership
- · Module development
- Module revision
- Training
- Guidance for Steering Committee brainstorming and meetings
- Oversight of budget and grant responsibilities
- Coordination with other ERWC/Bridge to College leaders
- Supervision of website development

From this list of integral activities, it becomes clear that estimating a cost for this person is difficult due to the varied nature of their tasks. Accordingly, the study team assumed the 1.0 FTE allocated for the first two periods (January 2017 through June 2019). Although the ERWC development period spans a year and a half (January 2017 through June 2018), the role is assumed to be 1.0 FTE across this time due to a smaller workload when development was just beginning. In Pilot Year 2, the workload changed and the position became 0.5 FTE. In the final year, some of the program activities shifted to the Steering Committee, and the CAR/W co-director spent only about 0.15 FTE on ERWC management.

The CAR/W co-director role is assumed to require the market price of a professor (Hollands et. al, 2015). Documentation of program travel for this position is extremely limited. Conservatively, WestEd researchers estimate that in the development year, the CAR/W co-director attended meetings with partners in Washington state. Mileage is calculated by obtaining the mileage between Sacramento, CA (where the CAR/W co-director lived) and Olympia, WA. Because this trip is over 250 miles, researchers applied a flight rate (Bureau of Transportation Statistics, 2021). The overnight rate is a national lodging average that includes a

⁵⁶ A description of this change in time is provided later in this section.



per diem (meal) allowance (Hollands et al., 2015). Researchers assume this trip required two nights in a hotel.

The ERWC Steering Committee also played an important role throughout the development and implementation of the ERWC. Its members' contributions to module writing and facilitation are included in the cost descriptions. Their time for Steering Committee meetings is reflected under that ingredient specifically. The CAR/W co-director's time attending these meetings is covered by that role's FTE and is not included in this estimate. This time consisted of one meeting per quarter, each of which lasted about 6 hours. Each ERWC Steering Committee member was assigned the price of a professor (Hollands et al. 2015). In the study's Evaluation Year, the Steering Committee Chair took on some of the responsibility of the CAR/W co-director, adding an estimated additional 0.15 FTE to their time.

There are very limited records of ERWC Steering Committee meetings. To calculate travel, researchers used available information to arrive at the following assumptions: Seventy-five percent of the Steering Committee had to travel for each in-person Steering Committee meeting; based upon committee member general locations, half of those traveled 40 miles and the other half traveled 200 miles. WestEd researchers multiplied the total miles by the driving mileage rate. WestEd researchers added hotel rooms (Hollands et al., 2015) for one night for all those who traveled, and then multiplied this amount by four to represent the four meetings per year. Additionally, researchers included the cost of meeting space for these meetings. The estimated room size was 900 square feet (a classroom that fits 20–30 students), calculated at the rate of a high school classroom (Hollands et al., 2015).

Two individuals provided administrative support. Their involvement is priced at the market price for administrative assistants (Hollands et al., 2015). One FTE is an FCSS administrative position, and 0.50 FTE is from an individual working for the CSU Chancellor's office. These individuals were assigned the same FTE for the year and a half development period as for each subsequent year of the study.

In addition to including the administrative position, FCSS staff time includes 1.8 FTEs. One FTE was a district administrator who was priced as a Chief Executive—Elementary and Secondary Schools (Hollands et al., 2015). This individual was responsible for building partnerships, working with the Steering Committee, and partnering on activities with the CAR/W co-director. A second person, the ERWC Coordinator for FCSS, worked the remaining 0.80 FTE on the ERWC and was priced as an Instructional Coordinator (Hollands et al., 2015). This individual supported the piloting of the ERWC in schools and supported module development. Similar to the CAR/W co-director and the administrative support positions, these positions remained consistent at 0.80 and 1.0 FTEs during the year and a half development period, reflecting the decreased load of the development period. Travel for the FCSS development staff is based upon records of their school site visits.⁵⁷

⁵⁷ The research team did not find records for Washington and San Francisco Bay Area trips but learned through participant interviews that these site visits need to be included based on the number of schools.



The FCSS district administrator and the instructional coordinator conducted school visits to recruit teachers and share more about the ERWC. Records do not reveal exactly how many schools they visited on each trip, but calculations were based as closely as possible on the total number of trips to each county or region.⁵⁸ During these trips, ERWC leaders also recruited schools for this evaluation study. Since this is not a development or implementation activity, WestEd researchers have attempted to only report the costs associated with recruitment to participate in the implementation of the ERWC (and to gather teachers' suggested revisions for the curriculum) and not the impact study. This analysis assumes (and reports) that 40 percent of these travel costs can be attributed to the development and implementation of the ERWC.

Summer Institute

The next key subcategory of non–school site costs is the Summer Institute. This category includes facilitator time, travel, and lodging; Institute materials; and space, equipment, and food costs for the Institute location. As described in the Professional Learning section earlier in this report, the Summer Institute is an integral implementation activity that prepares teachers to use the ERWC in their classrooms. ⁵⁹ Table 7.6 summarizes these estimated costs by specific ingredients.

⁵⁸ Rather than visiting schools individually, they often bundled trips to visit several schools in the same region at one time. Based on incomplete records, researchers based their estimates on visits to two-thirds of the schools in the development period, and then follow-up visits in Pilot Year 1 equal to about 50 percent of the trips taken in the development period. Mileage was calculated by obtaining the mileage between Fresno (CA) and the general town of the destination. For trips over 250 miles, a flight rate was applied, and for trips under that threshold, a driving mileage rate was applied. For driving miles, it is assumed that the two FCSS employees drove together. For flights, the mileage is doubled to account for two plane tickets. The overnight rate is a national lodging average that includes a per diem (meal) allowance. The hotel calculations include two rooms, one for the director and one for the instructional coordinator.

⁵⁹ The value of the time that ERWC teachers spent participating in the Summer Institute is not included in the estimated incremental costs. This is based on the assumption that in the "business-as-usual" context, teachers would spend the same amount of time during the summer preparing for the school year, including such activities as curriculum planning, curriculum development, and professional learning. Thus, this time represents no incremental cost.



Table 7.6 Cost Estimates of Summer Institute by Specific Ingredients

	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
Facilitator Time	\$83,155	\$68,603	\$51,565	\$203,323
Facilitator Travel	\$3,393	\$3,960	N/A	\$7,353
Facilitator Hotel	\$15,106	\$8,627	N/A	\$23,733
Facilitation Space	\$44,230	\$28,607	N/A	\$72,836
AV	\$19,879	\$17,370	N/A	\$37,249
Breakfast	\$4,240	\$3,047	N/A	\$7,287
Lunch	\$10,949	\$7,869	N/A	\$18,818
Binders	\$5,018	\$4,809	N/A	\$9,827
Total	\$185,971	\$142,891	\$51,565	\$380,426

Note. "N/A" indicates not applicable. Observed costs were reported to WestEd researchers directly rather than calculated with an estimated quantity and market price. Due to rounding, numbers may not sum exactly.

Source: Authors' calculations based on WestEd Summer Institute records; facilitation space quantity based on event planning guidance (Social Tables, n.d); breakfast, lunch, audiovisual services, and binder prices based on expenditure records from the CSU from 2019 (C. Morena-Donato, October 25, 2021); all other prices from CostOut (Hollands et al., 2015)

The Summer Institute brought teachers together to learn from facilitators (usually Steering Committee members). ⁶⁰ In 2018, the Summer Institute was five days, ⁶¹ and in each subsequent year it was three days. There were 10 Summer Institutes in 2018, 9 in 2019, and 8 (all virtual) in 2020. On average three facilitators attended each event, but the primary estimates are based on actual records of facilitation. Facilitators were paid a flat contract fee of \$600 per day. The

Teachers were encouraged to attend the Summer Institute closest to where they live/work. However, some teachers did travel and were compensated with hotel rooms and a mileage reimbursement. Available records only include counts of individuals reimbursed, but it was possible to reconstruct an estimate for this travel which amounted to approximately \$40,000 over the three summers (including one virtual Summer Institute). However, the cost of teacher travel/hotel rooms is not included in the Summer Institute cost estimates because these costs are assumed to be above and beyond what is necessary to implement the ERWC. This is because, as a general matter, Summer Institutes are held locally, near the participating schools and teachers, in which case travel costs are marginal. Furthermore, were the observed reimbursement included in the ERWC estimated costs, it would increase the ERWC estimated total incremental costs by about 2 percent.

⁶¹ Teachers who were new to ERWC attended all five days. Teachers who were already ERWC-certified only attended three days. Regardless, facilitators were engaged for five days.



observed total cost for facilitators was calculated based on multiplying this contract fee by the number of trainers by number of days and number of Summer Institutes.

WestEd researchers also constructed an estimated cost based on making some assumptions about facilitator time and the value based upon a market price. With respect to time, researchers assumed that facilitators used 3 hours of prep time per training and facilitated for 8 hours per day during the training. These hours were paired with the number of trainers per day (three) and number of training days to arrive at a total number of hours for each year. Finally, the market price of a professor, as with Steering Committee member time, was applied as an estimate of the typical value of facilitator time. The resulting estimated cost is very similar to the amount paid based on the observed price, which totaled \$159,320 (\$77,776 in 2018, \$52,328 in 2019, and \$29,216 in 2020). Though it is similar in each year, the total observed price is lower than the market price, suggesting that the actual value of the work was potentially more than the stipends offered.

Due to incomplete records, estimated (not observed) market prices for facilitator travel are reported.⁶²

The Summer Institute usually took place at a school site. For the most part, each Institute used the space free of charge, but researchers used a market price to estimate a cost for renting the gathering space and estimated costs for audiovisual equipment, food, and binders with training materials.⁶³

Accurate market prices for the other components and complete records of all these components for all the trainings were unavailable. Consequently, researchers estimated a shadow price based upon an average of observed expenses from the records available. Records for these ingredients were incomplete, and these figures represent researchers' best attempt at a reasonable average. The price estimates are as follows:

• Breakfast: \$6.97 per person per meal

• Lunch: \$18.00 per person per meal

Binders and attendee materials: \$33.00 per person

Audiovisual: \$2,000 per event

As appropriate, these prices were applied to associated multipliers (per attendee or per event) to get a figure for each year. Researchers made an assumption that all teachers participated, given the very high rates of attendance as reported earlier in this report.

⁶² Using records of which facilitators attended which Summer Institutes, WestEd researchers calculated the distance from facilitators' homes to the event space. For trips over 250 miles, a flight rate was applied, and for trips under that threshold, a driving mileage rate was applied. The overnight rate is a national lodging average that includes a per diem (meal) allowance. WestEd researchers estimated that all three facilitators needed hotel accommodations.

⁶³ Researchers constructed a market price for the gathering space by using an estimate for an auditorium and multiplying the number of participants by 12 square feet per participant, then multiplying that by the number of participants (Social Tables, n.d.). This price reflects the cost of a school auditorium.



Module Writing

The next subcategory of development costs is module writing and includes resources dedicated to the creation or revision of modules for the ERWC. Table 7.7 summarizes these estimated costs for specific ingredients.

Table 7.7 Estimated Costs of Module Writing, by Specific Ingredient

	ERWC Development (January 2017–June 2018)
Writing Full Module	\$262,572
Writing Mini-Module	\$59,163
Revising Full Module	\$31,463
Copyright	\$288,982
Formatting/Proofreading	\$42,654
Writers' travel	\$19,283
Total	\$704,117

Note. Observed costs were reported to WestEd researchers directly, rather than calculated with an estimated quantity and market price. The market total appears quite low because it does not include a price for copyright or formatting, which were large expenses in the module writing process.

Source: Authors' calculations based on records of writer stipends and interviews with ERWC staff (J. Bathina & C. Morena-Donato, personal communication, October 18, 2021; N. Brynelson, personal communication, October 19 and 21, 2021; R. Ching, personal communication, October 20, 2021; C. Street, personal communication, October 18, 2021); salary, lodging, and mileage rate data from CostOut (Hollands et al., 2015); observed prices for formatting and copyrights based on records provided by the CSU (C. Morena-Donato, personal communication, October 20 and 25, 2021)

Writing modules is a task that cannot easily be assigned work hours. Based on interviews and email communications with ERWC developers, it took some writers 30–40 hours, whereas others reported taking "several hundred hours." Some content is harder to develop, and writers took different approaches to the development of these materials. Based on interviews, the estimated averages for each of the module development tasks are as follows:

⁶⁴ The "several hundred hours" estimate constitutes an outlier and was not included in the estimates of module development time.



• Full-length module: 80 hours

• Mini-module: 50 hours

Revising module: 16 hours

Writers were divided into two wage categories within these task categories. One is for a teacher (with 6–9 years of experience) and the other is for a professor. Hours by wage category were then multiplied by the number of module products for each wage/product combination. WestEd researchers had records of module payment amounts and the number of writers and used this information to create market prices for the three writing categories: full, mini, and revisions (N. Brynelson, personal communication, October 19 and 21, 2021). These observed prices are fairly close to the market costs reported in Table 7.7. The observed price for full modules was \$235,000, slightly less than the market price, which may reflect that the observed price paid to module writers was below the full value of their time. For mini-modules writers, the observed cost was \$70,000, roughly \$11,000 more than the observed price, translating to roughly \$774 per mini-module. For revisions, the observed price was roughly \$3,500 less, or about an 11 percent decrease compared to the market cost.

Writers attended several retreats or workshops to work on their modules. To calculate the cost of this time, WestEd researchers made several assumptions, including that half of the writers traveled 40 miles and the other half traveled 200 miles. WestEd researchers multiplied the total miles by the driving mileage rate (Hollands, et al., 2015), then added hotel rooms (Hollands et al., 2015) for one night for each writer. These meetings happened three times in the module development period.

Copyrights are paid centrally by the ERWC grant for the use of the materials at all participating schools. WestEd researchers could not develop an appropriate market price, and observed prices provided in documentation by the CSU are used.⁶⁵

Three individuals formatted and proofread the modules. Records of their time were unavailable, but these individuals were on short contracts and not salaried employees of the CSU or FCSS. In the absence of information about their time, observed prices from contract documents provided by the CSU were used.

Additionally, the CAR/W co-director spent many hours doing consultations and final revisions on virtually all of the modules. However, time spent doing this work is already accounted for in the previous section, since all of their working hours are included in the estimated cost of this position.

⁶⁵ The study team was only able to verify fees paid in the single payment reported here during the ERWC development period.



Website

The next subcategory of development costs is the website and includes resources dedicated to the development and maintenance of the ERWC website (https://writing.csusuccess.org/). Table 7.8 summarizes these estimated costs for specific ingredients.

Table 7.8 Estimated Costs of Website, by Ingredient

	Pilot Year 2 (July 2019–June 2020)	Evaluation Year (July 2020–June 2021)	All Years	
Development	\$18,912	\$7,546	\$26,457	
Maintenance	\$8,549	\$69,226	\$77,775	
Contractor	\$30,349	\$20,756	\$51,105	
Web Hosting	\$62	\$127	\$189	
Total	\$57,873	\$97,654	\$155,527	

Note. Observed costs were reported to WestEd researchers directly, rather than calculated with an estimated quantity and market price. Website prices were not adjusted for regional variation because these prices are not necessarily driven by California-specific factors. The website development business is often remote, and the companies can serve clients all over the United States. The market price for the website activities does not include the contract with a website development firm. The market price captures the price of three Steering Committee members and one freelance designer. The observed prices are the prices of the contract. Due to rounding, numbers may not sum exactly.

Source: Authors' calculations based on accounts of time for website activities (C. Street, personal communication, October 18, 2021) and records on the design contract from the CSU (C. Morena-Donato, personal communication, December 13, 2021); salaries based on web developer rates from CostOut (Hollands et al., 2015)

Market cost estimates for the website were obtained from an interview with a Steering Committee member who was involved in the website. The research team divided website activities into two subcategories: development and maintenance.

Development:

- · Planning site map
- Brainstorming features
- Creating space in website
- Uploading new modules
- Communicating with stakeholders



Maintenance

- Uploading new materials
- Monitoring chatrooms
- Responding to user questions

The development work was carried out by several parties: ERWC Steering Committee members, a freelance web designer, and a contractor. The hours for these tasks varied throughout the website development process. In the first half of the second implementation year, the design hours averaged 20 hours per week (not including the contractor). This dropped to about 4 hours a week as the website was finalized. In this analysis, WestEd priced these activities at the salary of a web developer, though many activities do not require such an advanced skillset. Nonetheless, because the activities in this case were performed by a professor, a web developer is a cheaper cost and better reflects the role that might encompass these tasks.

Website maintenance time was split among several individuals, most of whom were Steering Committee members. During the development phase, website maintenance time was minimal, averaging about 4 hours a week. In the Evaluation Year, the time for maintenance activities jumped to 34.5 hours a week. These website maintenance activities are expected to continue as an ongoing activity supporting the curriculum. The same wage logic applied.

The website costs include an observed price for work done by a contractor for building the website and migrating old content. Also included is the cost of hosting the website.⁶⁷

Table 7.9 summarizes the estimated costs for non-school site activities, summarizing the components explained in the previous sections.

⁶⁶ In the Evaluation Year, once the website was moving out of the development stage, 15 weekly maintenance hours were dedicated to archiving previous module materials, 10 weekly hours were for an outside web contractor who performed maintenance and troubleshooting activities, 1.25 weekly hours were required for message board monitoring, 7 weekly hours were needed for troubleshooting and responding to inquiries, and the remaining 1.25 weekly hours were to prepare modules for upload.

⁶⁷ There was no record of website hosting costs—the exact type of service used is unknown to the research team. The reported cost is an average of 11 services ranked by PC Mag website (Wilson & Zamora, 2022). Liquid Web was excluded—the high price seemed to suggest it was providing services beyond the scope of the others. Special first year pricing and PC Mag coupon codes were accounted for in the averages.



Table 7.9 Summary of Estimated Costs for Non-School Site Resources

	ERWC Development (January 2017 –June 2018)	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
Curriculum Management and Development	\$560,834	\$520,054	\$410,193	\$357,469	\$1,848,550
Module Writing, Copyright, and Formatting	\$704,117	N/A	N/A	N/A	\$704,117
Website Development, Management, and Contracted Services	N/A	N/A	\$57,873	\$97,654	\$155,527
Summer Institute	N/A	\$185,971	\$142,891	\$51,565	\$380,426
Total	\$1,264,950	\$706,025	\$610,957	\$506,688	\$3,088,620

Note. "N/A" indicates not applicable. Observed costs were reported to WestEd researchers directly, rather than calculated with an estimated quantity and market price. Website prices were not adjusted for regional variation because these prices are not necessarily driven by California-specific factors. The website development business is often remote, and the companies can serve clients all over the United States. The market price for module writing does not include formatting and copyright expenses due to lack of an adequate market price; instead, these are reported as a combined observed price. The market price for the website activities does not include the contract with a website development firm. The market price captures the price of three Steering Committee members and one freelance designer. The observed prices are the prices of the contract. Due to rounding, numbers may not sum exactly.

Source: Authors' calculations; see prior tables for breakdown of sources for particular resource components

ERWC 3.0 School Site Implementation Costs

The second major category of costs and a key component of the ERWC is school site implementation. This category includes all resources dedicated to the piloting and implementation of the ERWC 3.0, taking place between July 2018 and June 2021 in participating high schools. It includes key resources such as ERWC teachers, coaches, and site leads, as well as the instructional materials, though an estimated incremental cost could not be provided for ERWC teacher time. Table 7.10 summarizes the estimated incremental costs for key subcategories of resources in this component. The table provides estimated costs and the subsequent explanations in this section provide detail on the assumptions or sources of uncertainty for particular ingredients, where necessary. Primary estimates rely on market prices but, when applicable, the observed expenditure is also provided as a point of comparison.



Table 7.10 Implementation Summary Table

	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
Site Leads and Coaches	\$283,009	\$274,766	\$266,763	\$824,538
Materials/Facilities	\$223,172	\$27,613	\$26,188	\$276,973
Total	\$506,181	\$302,379	\$292,951	\$1,101,511

Note. Observed costs were reported to WestEd researchers directly rather than calculated with an estimated quantity and market price. In this table, they reflect the reported cost of site leads and coaches.

Source: Authors' calculations; Tables 7.11, 7.12, and 7.13 provide breakdowns of these components and their sources

School Site Personnel

Implementing ERWC 3.0 required the investment of personnel time, in particular the time of participating ERWC teachers, site leads, and coaches. For those roles where an estimate was possible, this section describes the incremental costs.

ERWC teacher time was similar to that of teachers using a comparison curriculum. For example, classroom time was identical, so the ERWC incremental cost of teacher classroom time was \$0. However, WestEd identified two specific activities that may not require the same amount of time for ERWC teachers relative to comparison teachers: planning time and grading time. Given limited data available on this topic, the following paragraphs offer some exploratory analysis of the difference in time spent by ERWC and comparison English teachers.

The results from teacher interviews suggest that when using the ERWC curriculum, teachers spend less work time outside of the classroom on activities such as lesson preparation, materials, and grading. Based upon the interviews, the biggest difference is in grading time. The ERWC teachers reported grading almost 2 hours less per week on average than comparison English teachers. Specifically, ERWC teachers estimated on average spending about .76 hours per week, per section, on planning, compared to the 1.87 hours reported by comparison English 11 and 12 teachers. With respect to grading time, ERWC teachers reported on average spending about 1.03 hours per week, per section, compared to the 2.92 hours reported by comparison English 11 and 12 teachers. One explanation for these differences is that the significant investment in ERWC development pays dividends in reduced teacher time. Table 7.11 displays the estimated time ERWC and comparison English teachers reported spending on grading and planning.

⁶⁸ Many teachers described how the skill-focused units allowed them to narrow the scope of their grading, resulting in measurable time savings, which may translate to a reduction in teacher grading time overall.



Table 7.11 Estimated Time ERWC and Comparison English Teachers Reported Spending on Grading and Planning

	ERWC	Comparison English	Incremental Time (ERWC–Comparison)
Avg. Grading Hours per week/section	1.03	2.92	-1.89
Avg. Planning Hours per week/section	0.76	1.87	-1.11
Number of sections	3	3	0
Total hours/week	5.36	14.37	-9.01
Weeks/year	36	36	0
Total hours/year	192.89	517.32	-324.43
Total FTEs/year	0.13395	0.35925	-0.29

Note. The figures in this table assume 1,440 working hours per year. Source: Authors' calculations based on interviews in September and October, 2021 with ERWC and comparison curriculum teachers.

These data were collected through an interview process. Seven ERWC teachers and seven comparison teachers were interviewed over video conference in September and October 2021. Interviewee selection was not random. The two groups were not matched on teacher experience or school-level characteristics. The sample contained large variation, especially with respect to grading. This noisy sample decreased researchers' confidence in the validity of these averages. It is possible that these time savings were unique to the experience of the interviewees and would not be found if a larger sample was used.

If the savings in hours does hold true for the entire sample, this would have significant implications for the costs of the ERWC. Teachers are paid the same regardless of curriculum, so any difference in teachers' work time for the ERWC is not necessarily a cost savings. The way teachers use this time determines the return on this work reduction. For example, an ERWC teacher might use the reduction time in grading for personal rest, which likely would have benefits for their teaching—though such benefits are hard to measure and would vary by teacher. Alternatively, the teacher might use this "extra" time for professional development, which similarly could impact student achievement.

Nonetheless, researchers can assign a dollar value to these hours, because they represent potentially lower resources needed to implement the ERWC when compared with a comparison



curriculum. Of course, in this scenario, the districts are not experiencing reduced personnel costs—rather, they are experiencing higher efficiency with the personnel dollars relative to what they would use for comparison English.

Given the lack of reliable data, it is also possible that ERWC teachers will typically need to spend more time planning and grading than comparison teachers, which would add to the overall incremental costs for ERWC implementation.⁶⁹ Future implementations should consider this uncertainty when thinking about teacher contributions to this program.

Site Leads and Coaches

In addition to teachers, site leads and coaches were important personnel resources for the implementation of the ERWC. Table 7.12 summarizes the costs of their time over the three years of the implementation.

Table 7.12 Costs for Site Leads and Coaches

	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
Site Leads	\$185,080	\$179,690	\$174,456	\$539,226
Coaches	\$97,929	\$95,076	\$92,307	\$285,313
Coaching Meeting Space	\$9,725	\$6,890	\$6,068	\$22,683
Total	\$292,734	\$281,656	\$272,831	\$847,222

Note. Observed costs were reported to WestEd researchers directly rather than calculated with an estimated quantity and market price. Amounts for site leads and coaches are adjusted with combined California and Washington CWI, proportional to the number of California and Washington schools. Due to rounding, numbers may not sum exactly.

Source: Authors' calculations; quantities of site leads and coaches based on stipend records from the CSU from 2019 and 2020 (C. Morena-Donato, personal communication, October 25, 2021); market prices from CostOut (Hollands et al., 2015) based on the price of a teacher with 6–9 years of experience; square foot quantity for coaching meeting spaces from the GSA Office of Governmentwide Policy (2011)

The estimated amount of time that site leads spent working on the implementation of the ERWC is 1.75 hours a week during the school year. This estimate includes time to lead a 1-hour meeting, with 30 minutes of preparation time and 15 minutes of time to send out notes or resources after. These site leads were priced at the rate of a teacher with 6–9 years of experience.

⁶⁹ Some teachers reported needing time to sort through all the materials in each unit. Others reported that ERWC assignments were longer and richer and thus required a greater time investment.



For the observed prices, site leads were provided \$1,000 per school, and there were 49 schools in the study sample each year, which translates to \$139,448⁷⁰ over three years—significantly less than the researchers' estimate (\$539,226 over the study period). By estimating the cost of the time required for the role, as opposed to a flat contracted stipend, the cost approximately quadruples. This difference may suggest that site leads were willing to take on the position for less than the value of the time required to do it, which may not be the case in future implementation settings.

Coaches visited each of their teachers five times a year for an estimated 1.75 hours per visit. The breakdown is as follows: 45 minutes for class observation, 30 minutes for a conference with the teacher, and 30 minutes to send follow-up notes and resources. These hours were priced at the rate of a teacher with 6–9 years of experience (Hollands, et al., 2015). WestEd researchers' estimates (totaling \$285,313 over the study period) were roughly 40 percent of the observed price, which was \$668,298 over the study period.⁷¹ This difference between the observed and the estimated market price suggests that the market price or quantity (or both) is too low and does not reflect the value of the work performed by the coaches. Further investigation of the coach role is required to understand why the observed price is much higher.

The observed price varied by the number of teachers a coach worked with.⁷² As a coach took on more teachers, their payment per teacher went down. The contract price published is the number of coaches in each price/teacher band multiplied by the number of teachers in that band.

The cost of coaching should also include the space needed to host meetings between the coach and the teacher (outside of the classroom observation time).⁷³ This cost is likely already incurred—the ERWC is using classrooms that existed before—but it is important to note this as a program resource.

In addition, the ERWC grant paid for substitutes when coaches had to leave their own classrooms to do classroom visits or meetings. Records for this cost are incomplete and therefore not included in the total cost estimates or Table 7.12; but the 2019/20, school year observed price, based upon expenditure records provided by the CSU, was \$8,856 across all the schools, suggesting a negligible cost. ⁷⁴ In the Evaluation Year, there is a much lower estimated cost for this service because of the pandemic and new substitution strategies in virtual learning environments.

⁷⁰ This amount is adjusted to the final study year (2020/21) for inflation and discounting.

⁷¹ The observed price for coaches is likely slightly high. It reflects records from the beginning of each school year when teacher counts were four to six teachers higher than the number that continued throughout the school year. However, this explains only a small part of the discrepancy between observed and estimated costs.

⁷² Coaching stipend records from 2019 provided by the CSU show the following prices: \$1,800 per teacher if the coach is assigned 1 or 2 teachers, \$1,400 if they coach 3 teachers, \$1,300 if they coach 4 teachers, \$1,240 if they coach 5 teachers, \$1,200 if they coach 6 teachers, \$1,171 if they coach 7 teachers, \$1,150 if they coach 8 teachers, \$1,133 if they coach 9 teachers, and \$1,100 if they coach 12 teachers. (No coaches coached 10 or 11 teachers.)

⁷³ The proportion of use is the number of square feet (82 square feet for a two-person office) (GSA Office of Governmentwide Policy, 2011) multiplied by the number of teachers and then by five (the number of coaching meetings a year). This amount is then divided by the number of working hours in a year to make the square foot price an hourly price.

⁷⁴ Not all coaches needed a substitute to perform their coaching duties. Some were able to observe during free periods.



The ERWC has very limited materials costs. The only incremental cost identified was for books (see Table 7.13).

Table 7.13 Other Materials: Books

	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	All Years
Books	\$213,447	\$20,723	\$20,119	\$254,289

Note. Assumes each student gets four books a year.

Source: Authors' calculations based on a 2019 book order receipt from the CSU (C. Morena-Donato, personal communication, October 25, 2021)

Researchers estimated that each student received four books per year. Schools were instructed to reuse books after Pilot Year 1. Some amount of loss is expected, which researchers estimate at 10 percent of initial order per year. Researchers used a book price of \$11.16, which reflects the average from records of an ERWC book order through a national online outlet.

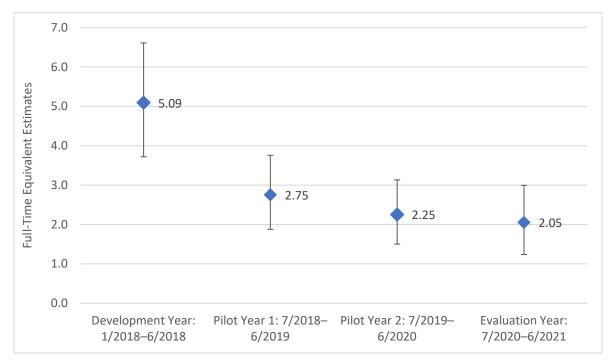
Sensitivity analysis

The overall cost of the ERWC is sensitive to changes in quantity, particularly personnel time. In this section, price changes resulting from adjustment to certain inputs are described. This analysis may provide useful information for those trying to scale the program up or down, or those interested in the cost implications of different personnel configurations.

In addition, because estimates rely on interviews and incomplete records, a reasonable range of quantities and prices for these ingredients can be demonstrated. Figure 7.1 provides a summary of FTEs for the positions adjusted in this sensitivity section, including their reported FTE (the blue diamonds) and bars representing increased and decreased FTEs for selected positions over the study period.



Figure 7.1 ERWC Full-Time Equivalent Estimates for CAR/W Co-Director, Administrative, Steering Committee, and Module Writer Positions



Note. The diamonds represent total FTEs for selected positions in each year, and the error bars represent the upper and lower bounds produced by the sensitivity analysis. This figure reflects only the positions covered in the sensitivity analysis (CAR/W co-director administrative support, Steering Committee, and module writers), not all ERWC costs. Source: Authors' calculations based on several sources; time estimates based on interviews with staff, and prices from CostOut (Hollands et al., 2015)

Overall, the analysis suggests that cost estimates are particularly sensitive to estimated time for the CAR/W co-director and administrative support staff. In each case, a marginal increase in allocated time results in a meaningful increase in costs. Specifically, a 25 percent increase in CAR/W co-director time adds over \$110,000 to the program costs, and an increase of 33 percent in administrative support adds just under \$93,000 to program costs over the study period.

Costs are also fairly sensitive to adjustments in Steering Committee time. For example, large increases (roughly 100%) result in over \$170,000 of additional costs.

In contrast, while there is substantial variation in module writer time estimates, the information gathered suggests the range is only plus or minus 20 percent for any particular module type,⁷⁵ and this range translates to an increase of only about \$70,000 across the 70 modules created in the development of the ERWC 3.0, or about \$1,000 per module.⁷⁶

One outlier from the interviews with module writers and Steering Committee members was not included when estimating the time required for the three module writing activities. The outlier estimate differed dramatically from other accounts and therefore was not included. This outlier is greater than a 20 percent increase in time.

⁷⁶ This estimate includes the costs for eight modules that were carried over from ERWC 2.0, which were substantially revised.



CAR/W Co-Director Sensitivity Estimates

As described previously, personnel costs, especially for development, were a significant investment. Table 7.14 provides personnel estimates based on different estimates of the time required for the CAR/W co-director position.

Table 7.14 CAR/W Co-Director Sensitivity Estimates

	ERWC Development (January 2017 –June 2018)	Pilot Year 1 (July 2018 –June 2019)	Pilot Year 2 (July 2019 –June 2020)	Evaluation Year (July 2020 –June 2021)	Overall Market Total	Total Difference From Current Estimate
CAR/W Co-Director Increased FTE Estimate (+25%)	\$228,330	\$219,496	\$106,551	\$31,034	\$585,411	\$117,082
FTE	1.25	1.25	0.63	0.1875		
CAR/W Co-Director	\$182,664	\$175,597	\$85,241	\$24,827	\$468,329	\$0
FTE	1	1	0.5	0.15		
CAR/W Co-Director Reduced FTE Estimate (-25%)	\$136,998	\$131,697	\$63,931	\$18,621	\$351,247	-\$117,082
FTE	0.75	0.75	0.375	0.11		

Source: Authors' calculations based on several sources; time estimates based on interviews with staff, prices from CostOut (Hollands et al., 2015)

This iteration of the ERWC had one full-time CAR/W co-director. For the four years of this study, the cost of this position totals approximately \$468,329, which includes decreased involvement over the years. Based on information collected from interviews, it is possible that this person was working more than 40 hours per week. If this position's time was increased by 25 percent, the cost goes up to \$585,411, representing a \$117,082 increase over the study period. In this instance of developing and implementing the ERWC, the co-director was not paid for those hypothetical extra hours—the ERWC would not have incurred costs for those hours. However, it is possible that in future program designs, this work could be spread over two people (or more) whose time in combination would equal 1.25 FTE.



Alternatively, as ERWC development solidifies (for example, for the modules and the website), it is also possible that the demand on the lead position could reduce, and 0.75 FTE would be sufficient to fill the role. This change would lead to a reduction of approximately \$117,082, for a total cost of \$351,247 over a four-year period. Figure 7.2 shows how spending changes over the four years, with the light shaded area reflecting researchers' estimated range of expenditures, given uncertainty around the FTE required for this position.

\$250,000 \$150,000 \$100,000 \$50,000 \$0 Development Year: Pilot Year 1: 7/2018— Pilot Year 2: 7/2019— Evaluation Year: 7/2018—6/2018 6/2019 6/2020

Figure 7.2 CAR/W Co-Director Cost With FTE Sensitivity Range

Note. The dark blue line represents the reported dollar amount for this position, and the light blue band on either side represents the range of costs resulting from the sensitivity analyses. The range of expenditures narrows significantly at the end. This narrowing does not reflect a reduction in uncertainty, but rather reflects that adjusting a smaller FTE results in much smaller dollar ranges.

Source: Authors' calculations based on several sources; time estimates based on interviews with staff, and prices from CostOut (Hollands et al., 2015)

Administrative Support Sensitivity Estimates

Similarly, changing the amount of time assigned to the administrative positions can significantly impact the total costs. Table 7.15 shows how costs change when estimates for personnel time are shifted.



Table 7.15 Administrative Support Sensitivity Estimates

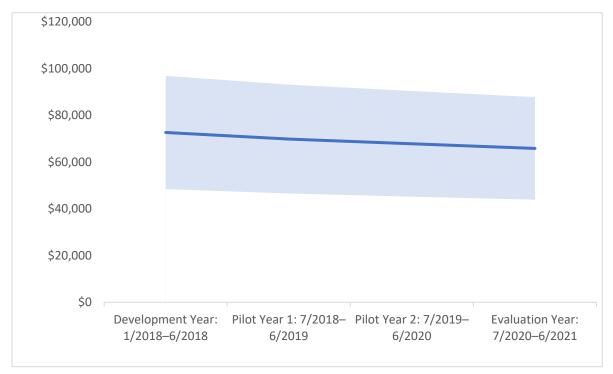
	ERWC Developme nt (January 2017–June 2018)	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	Overall Market Total	Total Difference From Current Estimate
Administrative Support FTE Increased Estimate (+33%)	\$96,839	\$93,093	\$90,381	\$87,749	\$368,063	\$92,016
FTE	2	2	2	2		
Administrative Support Reported Estimate	\$72,630	\$69,820	\$67,786	\$65,812	\$276,047	\$0
FTE	1.5	1.5	1.5	1.5		
Administrative Support FTE Decreased Estimate (-33%)	\$48,420	\$46,546	\$45,191	\$43,874	\$184,031	-\$92,016
FTE	1	1	1	1		

Source: Authors' calculations based on several sources; time estimates based on interviews with staff, and prices from CostOut (Hollands et al., 2015)

Administrative support was split over two positions—one at FCSS at 1.0 FTE and another at the CSU Chancellor's Office for 0.5 FTE—for a combined FTE of 1.5. If this collective position is increased to 2.0 FTE annually (an increase of 33%), the cost increases to \$368,063, representing a \$92,016 increase from the research team's current estimates for the study period. If, alternatively, this administrative support is reduced to 1.0 FTE, the cost over the four years is reduced by \$92,016, for a total of \$184,031 over the study period. This position remains at a stable FTE over the four years (Figure 7.3).



Figure 7.3 FCSS and CSU Administrative Support Positions' Cost With FTE Sensitivity Range



Note. The dark blue line represents the reported dollar amount for these positions, and the light blue band on either side represents the range of costs resulting from the sensitivity analyses. This figure appears to show a downward trend in costs. However, this downward trend does not reflect a reduction in cost, but rather reflects the discount adjustment. The discount adjustment modifies the costs to reflect that spending later on in the intervention is less costly than spending at the beginning (Levin & McEwan, 2000). Refer to the methods section of the cost analysis for more information.

Source: Authors' calculations based on several sources; time estimates based on interviews with staff, and prices from CostOut (Hollands et al., 2015)

Steering Committee Sensitivity Estimates

The estimates for the duration and frequency of Steering Committee meetings are the researchers' best estimates, but other meeting configurations are possible. Table 7.16 shows some of these possibilities, including increasing or decreasing the duration of the meetings.



Table 7.16 Steering Committee Sensitivity Estimates

	ERWC Development (January 2017–June 2018)	Pilot Year 1 (July 2018– June 2019)	Pilot Year 2 (July 2019– June 2020)	Evaluation Year (July 2020– June 2021)	Overall Market Total	Total Difference From Current Estimate
Steering Committee— Doubling the Number of Meetings (+100%)	\$92,737	\$89,149	\$86,552	\$108,859	\$377,297	\$176,235
FTE	0.51	0.51	0.51	0.66		
Steering Committee Members	\$46,368	\$44,575	\$43,276	\$66,843	\$201,062	\$-
FTE	0.25	0.25	0.25	0.40		
Steering Committee—Halving the Number of Meetings (-50%)	\$23,184	\$22,287	\$21,638	\$32,467	\$99,576	-\$101,486
FTE	0.13	0.13	0.13	0.28		

Note. In the Evaluation Year, the .15 FTE that the Steering Committee took on from the CAR/W co-director remains unadjusted (i.e., does not increase).

Source: Authors' calculations based on several sources; time estimates based on interviews with staff, and prices from CostOut (Hollands et al., 2015)

As described previously, ERWC Steering Committee members served many roles (website maintenance, module writer and revisor, facilitator, and so on). Members' time in these defined roles is accounted for in those roles. This sensitivity section is more narrowly focused on adjustments to Steering Committee meeting time. The potential range of costs for the Steering Committee is displayed in Figure 7.4.



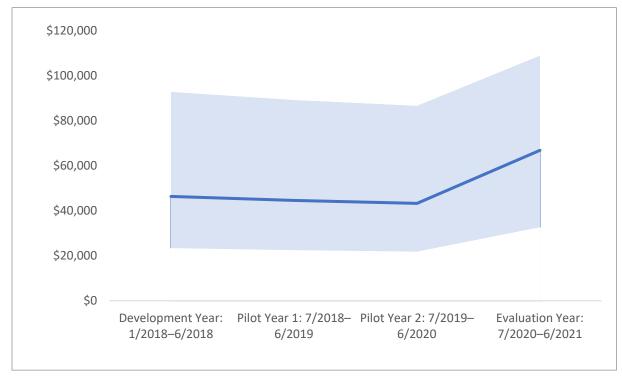


Figure 7.4 Steering Committee Meeting Time Cost With FTE Sensitivity Range

Note. The dark blue line represents the reported dollar amount for the Steering Committee meeting time, and the light blue band on either side represents the range of costs resulting from the sensitivity analyses. In the Evaluation Year, the .15 FTE that the Steering Committee took on from the CAR/W co-director remains unadjusted (i.e., does not increase). Source: Authors' calculations based on several sources; time estimates based on interviews with staff, and prices from CostOut (Hollands et al., 2015)

If meetings are increased to four 12-hour meetings (spread over two days) each year, the price increases by \$176,235, to a total of \$377,297 over the study period. This change represents the largest increase included in this sensitivity analysis. Instead, if the meetings were half as long as the research team's original estimate, becoming four 1-hour meetings a year, this change translates to a total of \$99,576, a reduction of \$101,486.

Module Writer Sensitivity Estimates

Module writing time was particularly hard to estimate because writers reported a very large range for the module production time. Therefore, sensitivity analysis is particularly important for these ingredients. Table 7.17 shows the estimated costs and the difference from the research team's reported estimate if module time is increased or decreased. These figures are given by the specific module product (full, mini, revision).



Table 7.17 Module Writer Sensitivity Estimates

	Hours Per Module	FTE	ERWC Development 2017/18	Difference From Current Estimate
Mini-Module Writer— Increased Hours Per Module Estimate (+20%)	60	0.42	\$70,996	\$11,833
Mini-Module Writer	50	0.33	\$59,163	\$-
Mini-Module Writer— Decreased Hours Per Module Estimate (-20%)	40	0.28	\$47,331	-\$11,833
Full Module Writer— Increased Hours Per Module Estimate (+20%)	96	2.18	\$315,086	\$52,514
Full Module Writer	80	1.8	\$262,572	\$-
Full Module Writer— Decreased Hours Per Module Estimate (-20%)	64	1.39	\$210,058	-\$52,514
Full Module Revisors— Increased Hours Per Module Estimate (+20%)	19.2	0.26	\$37,755	\$6,293
Full Module Revisor	16	0.21	\$31,463	\$-
Full Module Revisors— Decreased Hours Per Module Estimate (-20%)	12.8	0.18	\$25,170	-\$6,293

Source: Authors' calculations based on several sources; time estimates based on interviews with staff, and prices from CostOut (Hollands et al., 2015)

As described earlier, the module writers were paid a fixed fee for each piece of work they did (which is the observed price used in this report). A market price was calculated based on estimated hours and wage for each task.

Accounting for this module writing time varied greatly by participant and by difficulty of the module. Based on interviews, email communications, and reimbursement documentation from the CSU, WestEd researchers developed an estimate of hours for each module development activity to show how costs would change if the necessary hours actually averaged to higher or



lower amounts. Unlike the other sensitivity adjustments in this section, which are increases/decreases to the FTE of each position, the module writer sensitivity analysis was conducted by increasing or decreasing the hours per module activity, as shown in Table 7.17.

The largest reduction would come from reducing the number of hours for all full module writing (a total savings of \$52,514 for all the full modules, or roughly \$1,000 per full module). The greatest increase would come from an increased number of hours for full module writing, translating to an increase of \$52,514 for all the full modules.

Cost Analysis Limitations and Implications

Comparison Costs

Due to data limitations, the incremental costs do not account for the cost of the commercial comparison course curricula. However, it should be noted that WestEd researchers believe that these costs would not materially impact the overall results. This is because the use of comparison course commercial curricula is spread over many years, and thus the costs would also be spread across the period of time over which the materials may be used, generally reducing the costs in any given year; this is similar to the process of amortizing durable goods such as computer hardware. And, in many cases, the commercial curriculum is part of a package of materials designed to serve as the curriculum for more grade levels than the comparison courses alone, and thus only a portion of the annualized costs would be attributed to the comparison courses.

Nonetheless, the reported ERWC incremental costs are likely upwardly biased. This is because there is some cost associated with commercial curricula that would be part of comparison course costs, and this cost would be subtracted from corresponding ERWC costs as part of the calculation of incremental costs. This known source of bias should be taken into consideration when reviewing the incremental cost estimates.

Availability of Data

The analysis is limited by the lack of cost data for this project. In certain domains (e.g., travel), records of price and quantity were available. However, in other domains, information was missing about the number of individuals or materials involved, and researchers had to fill in the gaps to identify an estimated price and quantity.

Variable Estimates of Time

As described earlier, interviews yielded a range of time estimates for each personnel role. For teacher interviews, the goal was to capture the variation in teacher time outside of the classroom and not necessarily the averages. The purpose of interviewing Steering Committee members and other leaders was to obtain averages for the activities associated with various



positions, including module writers, Steering Committee members, and other development roles. Though an average was estimated, the time (and thus the cost) of a task may vary, and this variation will affect estimated program costs. Consequently, the total estimated cost of the intervention may be higher or lower depending on the accuracy of the time estimates.

Influence of the Pandemic

Certain costs were influenced by the pandemic, and these are reflected in the cost analysis's estimates. For example, the Summer Institute was held online in 2020, resulting in reduced rental and food expenses for this component of ERWC implementation. Other costs remained the same, including personnel time and the cost of books.

As leaders attempt to replicate this intervention in the current context, they should consider how hybrid and interrupted learning may impact the costs of the program. Additionally, there are lessons to be learned from the flexibility required by the pandemic. Perhaps some coaching and training can be done virtually—presenting a possible cost savings.

Strength of the CSU System

California has an abundance of writing and reading pedagogy professors. Researchers estimated the time that professors spent on the ERWC by using a market rate. However, it is hard to estimate the influence of this strong educational community. For example, this community possibly made the planning more efficient because leaders could easily recruit experts who were familiar with the California context. In addition, program leaders had institutional support from the CSU for meeting rooms, grant administration, and similar needs.

General Limitations of Cost Analysis

The analysis is also subject to common issues that introduce uncertainty in cost estimates. These tend to fall into the following categories:

- Participants and researchers may be missing intangible costs. For example, Steering
 Committee members could be conducting or consuming pedagogy research for their
 other roles or positions, but then applying this knowledge to their work on the ERWC.
 This possibility was mitigated by triangulating expense records with interviews of
 participating staff.
- Participants and researchers may have a poor understanding of the value of time or particular materials. For example, participants and researchers may misunderstand the skills and experiences needed to perform a role, potentially leading to the assignment of incorrect prices or quantities.
- In a school setting, leaders often invest resources (including staff time and money)
 within a context of constraints, and spending is more a reflection of these resource
 constraints than the actual cost of the intervention. In other words, spending can be
 determined by the money available and not the exact needs of the intervention.



Implications

At a total incremental cost of \$62 per student annually, ERWC represents a nontrivial investment of resources. Importantly, one factor leading to this per student cost is that the ERWC's costs in this study were spread over a short time period and relatively small number of students. As the ERWC grows, this cost per student will decrease for two reasons: More students will be served, dividing some of the training and program management costs over more students; and the scale of investments in development (e.g., creating new modules, paying for full-time program development leadership) will drop significantly, reducing one large component of costs.

According to this study's cost analysis, incremental costs could vary dramatically based on the amount of teacher time required by the ERWC. If the results from this study's relatively small sample align with the broader population, then the cost of the ERWC may actually represent a net savings due to a reduction in teacher planning and grading time. If future research can confirm that the ERWC requires less teacher time, that could be an important motivation for continuing to invest in the management and administration of the program. In other words, the one-time and ongoing management costs may be worth the expense if teacher time for planning and grading is indeed reduced.



8. Conclusion

This report presents the findings of an evaluation of the impact and implementation of the ERWC 3.0 for an Investing in Innovation (i3) Validation grant. Impacts were measured at the end of grade 11 and at the end of grade 12, with the implementation of the curriculum being studied as well.

As described throughout this report, the COVID-19 pandemic had profound effects on the grant, in terms of both how the grant was implemented and the results obtained from the impact evaluation. When the pandemic began in March of 2020, standardized testing was set to begin only a month later, which would have allowed WestEd researchers to assess the impact of the ERWC on student achievement in grade 11. The standardized testing for the 2019/20 school year was understandably cancelled, and WestEd researchers made the decision to conduct another randomized controlled trial evaluation in grade 11 during the 2020/21 school year. When the decision was made—around May 2020—to do another impact evaluation in grade 11 during the 2020/21 school year, there was still a belief that the 2020/21 school year would resume in a more normal manner. The quasi-experimental design of the grade 12 ERWC impact evaluation also went ahead as scheduled for the 2020/21 school year.

However, the 2020/21 school year proceeded to include distance learning for many of the study schools for much of the school year. As described in the implementation chapter, this situation had major implications on student learning in both the ERWC and comparison English courses. Nevertheless, WestEd researchers continued collecting data on the implementation of both the ERWC and the comparison courses in order to document the successes and challenges of teaching during the pandemic. At the end of the 2020/21 school year, study participants were assessed in English language arts (ELA)/literacy in order to determine if there was an impact of the ERWC during the pandemic year. The administration of the ELA/literacy standardized assessment often took place while students were at home, making the assessment even more challenging for students to complete. Overall test-taking rates of the study participants were low, although they were similar between ERWC and comparison students.

Regardless of the circumstances under which the evaluation took place, data for both the implementation evaluation and the impact evaluation were collected for the 2020/21 school year. Implementation data showed that teachers participated in the professional learning at high rates (at least 84 percent), although teaching the required number of modules with fidelity was a big challenge for teachers. Teachers noted that they did not have enough instructional minutes during the school year to teach all of the required ERWC modules. Overall, teachers



reported that the ERWC promoted a high level of student engagement and that it supported students' academic and personal growth.

Student achievement data were collected at the end of the 2020/21 school year—study students took either the ELA/Literacy Summative Assessment, the Non-Performance Task (Non-PT) Interim Comprehensive Assessment (ICA), or the Performance Task (PT) ICA. Among the grade 11 students who took the Non-PT ICA, students who were assigned to the ERWC scored higher than students assigned to the comparison English course, and the difference was statistically significant. However, among grade 11 students who took the Summative Assessment, there was not a statistically significant difference in achievement between students assigned to the ERWC and students assigned to the comparison course. In the grade 12 impact evaluations, there was not a statistically significant difference in achievement between ERWC and comparison students for either of the study samples—students who took the Non-PT ICA or students who took the PT ICA.

A cost analysis was also conducted as part of the evaluation to understand the costs of developing and implementing the ERWC. The ingredients method was used to identify the personnel, materials, and facilities required for the ERWC, and then prices were attached to those ingredients to arrive at an estimated incremental cost. The cost analysis suggests that the ERWC is a modest investment, and the upfront investments in curriculum development and teacher trainings will become less significant over time.

This ERWC evaluation took place during the pandemic years, when teachers often taught their students in a remote fashion. The distance learning occurred for both ERWC teachers and comparison English teachers, making the implementation of English courses equally hard in both groups. These were not ideal conditions to conduct an impact evaluation of the ERWC, as the implementation of the ERWC and the comparison curriculum did not occur as they were intended by the developers. Nevertheless, due to the constraints of the i3 grant, the evaluation and impact analyses were completed, with information about the implementation and impact during these extraordinary times documented. However, evaluating the ERWC with students physically located in schools during the learning process remains an important endeavor to pursue in the future.



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Appendix A. List of Modules by Category and Grade Level Published in the ERWC 3.0

- Modules that were originally in the research category were recategorized into either
 the issue or book category. The developers made this change because modules in
 other categories also contain research components and the research category may
 have misled teachers to believe that the modules in the research category were the
 only modules that required students to conduct research.
- One module in the foundational document category was re-categorized into the issue category. The developers determined that the module did not adequately address the intended standard for being a foundational document module.
- Portfolio modules, originally considered to be mini-modules, were placed into their own category. The developers made this change because the nature of portfolio modules is different from the nature of mini-modules; portfolio modules, taught at the beginning and end of the school year, allow students to compile their work and reflect on their learning, whereas mini-modules introduce and/or review rhetorical concepts.
- The ERWC Steering Committee also changed the policy so that mini-modules could be taught in either grade 11 or grade 12. An additional mini-module was added, and three full-length modules were not published in the final version of the ERWC 3.0.
 Additionally, some of the names of the modules changed. See Appendix A for a full list of modules by category as published in the ERWC 3.0.
- The ERWC Steering Committee changed the required number of modules to be taught. This change was in response to feedback provided by teachers throughout Pilot Year 1 that it was challenging to teach six full-length modules and five mini-modules in one school year. Specifically, the committee changed the requirement to five full-length modules, three mini-modules, and two portfolio modules. Beginning in Pilot Year 2, ERWC teachers were also required to teach one fewer issue module, and while teaching the portfolio modules was optional in Pilot Year 1, it became a requirement beginning in Pilot Year 2.



Table A.1 ERWC 3.0 Modules

Category	Grade 11	Grade 12
Book	"The Boy Who Harnessed the Wind" "The Distance Between Us" "The Great Gatsby" "The Things They Carried" "Service and Sacrifice"	"Big Brother and the Authoritarian Surveillance State: George Orwell's 1984" "Brave New World" "Cambodia Remembers" "Into the Wild" "The Curious Incident of the Dog in the Night-Time" "The Immortal Life of Henrietta Lacks" "Working Class Hero: Hawkeye"
Drama	"So What's New? Zoot Suit and New Dramatic Potentials" "The Crucible"	"The Tragedy of Hamlet, Prince of Denmark" "The Tragedy of Othello, the Moor of Venice"
Foundational Document	"March Book Three and the Civil Rights Movement, Then and Now" "Speech in America: Rhetoric of Foundational Public Speeches" "The Big Break-up: Declaration of Independence"	[None for grade 12]
Issue	"Chance Me: Recognizing Merit" "Changing Minds: Thinking About Immigration" "Civil Disobedience" "Daily Challenge: Mental Illness in Our Lives" "Generation to Generation: Learning From Each Other" "Human Impact on Climate" "Nonconformity: Yay or Nay?" "Poetry for the People" "Racin' America" "Segregation, Integration, Justice: Brown v. Board of Education" "Teenage Sleepers: Arguing for the Right to Sleep In" "The Danger (and Power) of a Single Story" "The Rhetoric of the Op-Ed Page" "What's Next? Thinking About Life After High School"	"Fake News and Bias in Reporting" "Gun Violence: A Public Health Issue" "Human Impact on Climate" "Is Boredom Good for You?" "Island Civilization" "Juvenile Justice" "Language, Gender, and Culture "Narrative Medicine" "On Leaving On Staying Behind" "Politics of Food" "Ready to Launch" "The Daily Me" "The New Space Race: Traveling to Mars" "The Value of Life" "Waste More, Want More" "What's Next? Thinking About Life After High School" ⁷⁸

 $^{^{77}}$ This module is also considered a grade 12 module. 78 This module is also considered a grade 11 module.



Category	Grade 11	Grade 12
Portfolio ⁷⁹	"Introducing ERWC 11: Portfolios and Metacognition" "Final Reflection on Learning: The ERWC 11 Portfolio"	"Introducing ERWC 12: Portfolios and Metacognition" "Final Reflection on Learning: The ERWC 12 Portfolio"
Mini	"Analyzing Audience: Pathos as Inquiry" "Analyzing the Rhetorical Situation: The Case of Becoming Assessment Savvy" "Classical Pattern of Persuasion" "Introducing Ethos, Pathos, Logos" "Introducing Exigence" "Introducing Genre as Rhetoric" "Introducing Inquiry Questions" "Introducing Kairos" "Introducing Stasis Theory: Finding Common Gruntroducing the Rhetorical Situation" "Introducing Transfer of Learning" "Toulmin Model as Inquiry into Audience" "Using the Toulmin Model to Analyze Argumen	round and Asking the Right Questions"

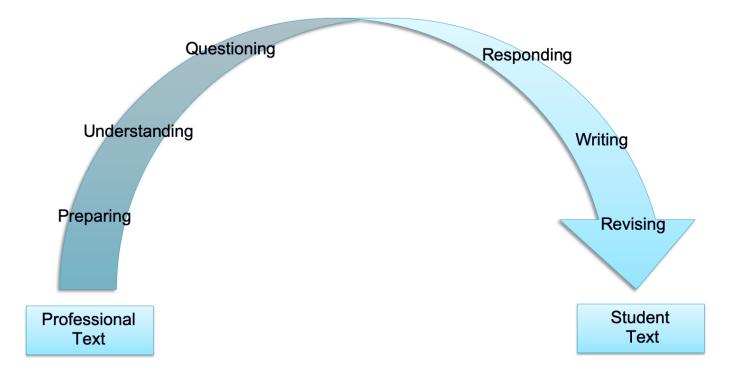
 $^{^{79}}$ This category was developed after the first pilot year.



Appendix B. The ERWC Arc

Instruction for each module follows an "arc," beginning with professional texts that students read and leading to texts that students write. Although the arc is depicted as moving in one direction, the actual process is iterative, with students writing from the earliest stages and professional texts informing the process throughout. The key is that teachers and students engage in instruction for all strands of the template, moving along the arc, so that students read, speak, listen, and write in every module. As students internalize the intellectual moves and progress through the arc for each course module, they become increasingly independent, and teachers adjust instruction based on assessment within and across modules, the semester, and the year.

Figure B.1. The ERWC Arc





Appendix C. ERWC Summer Institute Survey Protocols

Pilot Year 1

- 1. Please indicate the degree to which you agree or disagree with the following statements. At the ERWC Summer Institute, there were sufficient opportunities to... (Choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)
 - a. experience rhetorical reading and writing approaches and strategies that could be used with my students.
 - b. observe ERWC approaches and strategies modeled by facilitators.
 - c. ask questions about the ERWC approach.
 - d. reflect on my own teaching practice.
 - e. develop ways to continue communicating and collaborating with other ERWC teachers.
- 2. One key idea or takeaway from this ERWC Summer Institute is...
- 3. I still have questions or am wondering about...
- **4.** What aspects of the ERWC Summer Institute most strongly supported your teaching practice?
- 5. How can we support your implementation of ERWC throughout the pilot year?
- **6.** What suggested topics do you have for the 2019 ERWC Summer Institute?

Pilot Year 2

- Please indicate the extent to which you agree or disagree with the following statements.
 At the ERWC Summer Institute, there were sufficient opportunities to... (Choices:
 Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)
 - a. explore lessons learned from Pilot Year 1 (2018/19).
 - b. ask questions about the ERWC approach.
 - c. examine the course structure and map a 2-year ERWC plan.



- d. reflect on my own teaching practice.
- e. learn from other ERWC teachers.
- 2. One key idea or takeaway from this ERWC Summer Institute is...
- 3. I still have questions or am wondering about...
- 4. How can we support your implementation of ERWC throughout the 2019/20 school year?

Evaluation Year

- 1. Please indicate the extent to which you agree or disagree with the following statements. At the ERWC Summer Institute, there were sufficient opportunities to... (Choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)
 - a. explore lessons learned.
 - b. learn from other ERWC teachers.
 - c. reflect on my teaching practice and set learning goals for continued professional growth.
 - d. discuss challenges related to online learning.
- 2. One key idea or takeaway from this ERWC Summer Institute is...
- 3. I still have questions or am wondering about...
- 4. How can we support your implementation of ERWC throughout the 2020/21 school year?



Appendix D. ERWC Teacher Module Survey Protocols

Pilot Year 1

- 1. First and Last Name
- 2. School
- Grade Level
- 4. Type of Module Taught
- Module Taught
- **6.** To what extent was the module engaging for students? (Choices: Not engaging, Slightly engaging, Moderately engaging, Very engaging, Extremely engaging)
- 7. How many class periods did it take you to complete the module?
- **8.** Please check the box if you taught the activity. Please be sure to check the box even if you only taught part of the activity or combined the activity with another activity. Then, for the activities you taught, please describe major modifications you made (if any). (All activities for each module are listed.)
- **9.** Below are statements about some issues you may have experienced while teaching the module. For each statement, please indicate whether you experienced the issue. If you experienced the issue, please share your recommendations for revisions. (Choices: Yes, No)
 - a. I needed to clarify or restate concepts or instructions.
 - b. The instructional approach needed to be better aligned with the objectives/learning goals.
 - c. I needed a student sample [to illustrate a point for students] and did not have one.
 - d. I needed more built-in opportunities for formative assessment.
 - e. Other



- **10.** The following questions ask about how the module addressed English Language Development (ELD) standards and Universal Design for Learning principles.
 - a. The module was inquiry-based.
 - b. The module provided opportunities to develop oral language through listening, discussion, and formal presentations.
 - c. The module supported instructional approaches that leverage the cultural, linguistic, and social assets of English learners.
 - d. The integrated and designated ELD activities provided ample opportunities for students to talk about how language works in the text.
 - e. The module provided opportunities for students to develop advanced levels of academic language at multiple levels.
 - f. The module provided multiple means of representation (i.e., ways for students to understand the text).
 - g. The module provided multiple means of student action and expression.
 - h. The module provided multiple means of student engagement (i.e., ways to recruit and sustain interest and self-regulation).
- 11. Please indicate the extent to which you agree or disagree with each of the following statements. (Choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)
 - a. The module used an open-ended, inquiry-based approach that allowed students to develop their own thinking.
 - b. The module provided opportunities for students to collaborate and engage in rich discussions to develop oral language.
 - c. The module supported instructional approaches that leverage the cultural, linguistic, and social assets of all learners.
 - d. The integrated and designated ELD activities provided ample opportunities for students to talk about how language works in the text.
- **12.** The module provided opportunities for students to develop advanced levels of academic language at multiple levels.
- **13.** The module provided multiple means of representation (i.e., ways for students to understand the text).
- **14.** The module provided multiple means of student action and expression (i.e., ways for students to demonstrate their learning).
- **15.** The module provided multiple means of student engagement (i.e., ways to recruit and sustain interest and self-regulation).



- **16.** The module provided opportunities for students to become expert learners through the use of learning goals, teacher-directed student choices, and formative assessment.
- **17.** Is there anything else you would like to share regarding your experience teaching this module? Please explain.

Pilot Year 2

- 1. First and Last Name
- 2. School
- 3. Grade Level
- 4. Type of Module Taught
- 5. Module Taught
- **6.** How many class periods did it take you to complete the module?
- **7.** Which version of the module did you teach this year? (Choices: Unrevised draft, Final version)
- **8.** How many class periods did it take you to complete the module?
- **9.** To what extent was the module engaging for students? (Choices: Not engaging, Slightly engaging, Moderately engaging, Very engaging, Extremely engaging)
- 10. Please check the box if you taught the activity. Please be sure to check the box even if you only taught part of the activity or combined the activity with another activity. For the activities you taught, please describe any major modifications you made (if any). (All activities for each module are listed.)
- 11. Please indicate the extent to which you agree or disagree with the following statements. (Choices: Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
 - a. Students generated and reflected on learning goals to guide their own learning throughout the module.
 - b. Students had multiple opportunities to work with text(s) to support comprehension (i.e., read, chunk text, annotate, make notes, journal, use graphic organizers, discuss, compare, synthesize, etc.).
 - c. Students had multiple opportunities to engage in inquiry-based discussions throughout the module (pair/share, small group, whole group).
 - d. Students had adequate time to engage in the activities in the Writing Rhetorically section of the arc.



- e. Students' completion of the activities prepared them to be successful on the culminating task.
- f. Students' completion of the culminating task helped prepare them to be successful in their college and/or career path.
- **12.** What, if anything, made this module engaging for students?
- **13.** Is there anything else you would like to share regarding your experience teaching this module? Please explain.

Evaluation Year

- 1. First and Last Name
- 2. School
- 3. Grade Level
- 4. Type of Module Taught
- 5. Module Taught
- **6.** How many class periods did it take you to complete the module?
- 7. To what extent was the module engaging for students? (Choices: Not engaging, Slightly engaging, Moderately engaging, Very engaging, Extremely engaging)
- **8.** Please check the box if you taught the activity. Please be sure to check the box even if you only taught part of the activity or combined the activity with another activity. For the activities you taught, please describe any major modifications you made (if any). (All activities for each module are listed.)
- **9.** Please indicate the extent to which you agree or disagree with the following statements. (Choices: Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
 - a. Students generated and reflected on learning goals to guide their own learning throughout the module.
 - b. Students had multiple opportunities to work with text(s) to support comprehension (i.e., read, chunk text, annotate, make notes, journal, use graphic organizers, discuss, compare, synthesize, etc.).
 - c. Students had multiple opportunities to engage in inquiry-based discussions throughout the module (pair/share, small group, whole group).
 - d. Students had adequate time to engage in the activities in the Writing Rhetorically section of the arc.



- e. Students' completion of the activities prepared them to be successful on the culminating task.
- f. Students' completion of the culminating task helped prepare them to be successful in their college and/or career path.
- **10.** What percentage of students completed most or all of the assigned reading and writing in this module?
- Please indicate the extent to which you are satisfied with the following.
 (Choices: Not satisfied, Somewhat satisfied, Moderately satisfied, Very satisfied, Extremely satisfied)
 - a. Students' ability to follow directions throughout the module
 - b. Students' ability to keep up with the pace of the module
 - c. Quality of student-to-student discussions
 - d. Students' comprehension of the text(s)
 - e. Quality of students' writing on the culminating task
 - f. Quality of student–teacher relationships
- 12. How, if at all, did you adapt the module to facilitate online discussions?
- **13.** Is there anything else you would like to share regarding your experience teaching this module?



Appendix E. Teacher Interview Protocol

Pilot Year 1—ERWC only

Background

1. How are things going with the pilot this school year?

Teaching Practice and Student Outcomes

- 2. To what extent have students been interested and engaged in the modules?
- 3. Which other English classes have you taught?
 - a. (If they have taught English 11 or English 12): How does teaching the ERWC differ from teaching English 11 or English 12? How might these differences relate to differences in student achievement that may be observed at the end of the school year?
 - b. (If they have not taught English 11 or 12): How does teaching the ERWC differ from teaching other English classes? How might these differences relate to differences in student achievement that may be observed at the end of the school year?
- 4. What does your planning process for teaching a module look like?
- 5. How do you decide to skip or go more in-depth on activities?
 - a. What are you looking for from your students that signifies they are ready to move on?
- 6. How has the pacing of teaching the modules been going this year?
 - a. If the modules have been taking longer to teach, what are the reasons for this?
- **7.** How are your students using learning goals in the classroom?
- **8.** What strategies and skills are your students learning?
- 9. How are students with lower levels of achievement doing in your ERWC class?
- 10. How well have the activities set students up to be successful on the culminating tasks?



- **11.** How, if at all, has the ERWC affected your students' academic achievement as measured by the Smarter Balanced assessment for teachers?
- **12.** The "transfer of learning" means that the learner acquires knowledge and skills in one setting and carries them over to other settings that may be different. To what extent has the ERWC helped you teach the transfer of learning?
- **13.** What are you planning to do differently next year?

Professional Learning

- **14.** How, if at all, are your coaching sessions supporting your implementation of the ERWC? Are there any ways in which the coaching sessions could be improved?
- **15.** How, if at all, are your ERWC-focused community of practice meetings supporting your implementation of the ERWC? Are there any ways in which the community of practice meetings could be improved?
- **16.** How, if at all, is your school or district supporting your implementation of the ERWC?
- **17.** Are there any additional professional learning opportunities or resources that could support your teaching of the ERWC?

Other

- **18.** If you could make one recommendation/suggestion to the CSU to improve the ERWC, what would it be? How could the ERWC better prepare students for the Smarter Balanced assessment?
- **19.** Is there anything else you would like to add that would help WestEd understand your experience piloting the ERWC?

Pilot Year 2—ERWC

Background

1. How are things going with the pilot this school year?

Teaching Practice and Student Outcomes

- 2. To what extent have students been interested and engaged in the modules?
- 3. Which other English classes have you taught?
 - a. (If they have taught English 11 or English 12): How does teaching the ERWC differ from teaching English 11 or English 12? How might these differences relate to differences in student achievement that may be observed at the end of the school year?
 - b. (If they have not taught English 11 or 12): How does teaching the ERWC differ from teaching other English classes? How might these differences relate to differences in student achievement that may be observed at the end of the school year?
- **4.** What does your planning process for teaching a module look like?



- 5. How do you decide to skip or go more in-depth on activities?
 - a. What are you looking for from your students that signifies they are ready to move on?
- **6.** How has the pacing of teaching the modules been going this year?
 - a. If the modules have been taking longer to teach, what are the reasons for this?
- **7.** How are your students using learning goals in the classroom?
- 8. What strategies and skills are your students learning?
- 9. How are students with lower levels of achievement doing in your ERWC class?
- **10.** How well have the activities set students up to be successful on the culminating tasks?
- **11.** How, if at all, has the ERWC affected your students' academic achievement as measured by the Smarter Balanced assessment for 11th grade teachers?
- **12.** The "transfer of learning" means that the learner acquires knowledge and skills in one setting and carries them over to other settings that may be different. To what extent has the ERWC helped you teach the transfer of learning?
- **13.** What are you planning to do differently next year?

Professional Learning

- **14.** How, if at all, are your coaching sessions supporting your implementation of the ERWC? Are there any ways in which the coaching sessions could be improved?
- **15.** How, if at all, are your ERWC-focused community of practice meetings supporting your implementation of the ERWC? Are there any ways in which the community of practice meetings could be improved?
- **16.** How, if at all, is your school or district supporting your implementation of the ERWC?
- **17.** Are there any additional professional learning opportunities or resources that could support your teaching of the ERWC?

Other

- **18.** If you could make one recommendation/suggestion to the CSU to improve the ERWC, what would it be? How could the ERWC better prepare students for the Smarter Balanced assessment?
- **19.** Is there anything else you would like to add that would help WestEd understand your experience piloting the ERWC?



Pilot Year 2—Grade 11 Comparison Course

Background

1. How many years have you taught English 11?

Curriculum

- 2. What curriculum are you using?
- 3. How much do you modify the curriculum you are using?
 - a. What changes do you make?
 - b. Why do you make those changes?
- **4.** What texts are taught in the curriculum you are using?
 - a. Which full-length texts are taught?
 - b. What types of excerpts and articles are taught?
- **5.** Please describe the writing assignments that students complete in your English 11 course.
- **6.** How do you decide what are the most important skills for students to learn in the English 11 course?
- 7. Do you administer tests and guizzes in your class? If so, how often?
- **8.** How much focus is there on rhetorical analysis in this course?
- Approximately how much of the curriculum do you cover in the school year?Please explain.

Teaching Practice

- 10. What does your planning process for teaching the curriculum look like?
- **11.** To what extent do you adapt the curriculum you are using to meet students' needs?
- **12.** Do you assign reading and homework to be done outside of class?
 - a. If so, how much per week?
 - b. What percentage of students complete most of the assigned reading and homework?
- **13.** What types of preparation do the students do for the Smarter Balanced ELA/literacy summative assessment?

Student Outcomes

- **14.** How interested and engaged have students been in the curriculum? What do you think makes the curriculum engaging?
- **15.** How comfortable are students with sharing their thoughts, opinions, and ideas in your English 11 class? (Probe for examples.)



16. To what extent do you think the English 11 curriculum prepares students for the Smarter Balanced ELA/literacy assessment? To what extent do you think the English 11 curriculum prepares students for college-level English? To what extent do you think the English 11 curriculum prepares students for their future careers?

Professional Learning

17. Please describe the types of professional learning opportunities that you have participated in this year.

Other

18. Is there anything else you would like to share regarding your experience teaching the English 11 course?

Evaluation Year—ERWC

Background

1. How is the implementation of the ERWC 3.0 going this school year?

Online Learning

- 2. Please describe your school's schedule for online or hybrid learning at the beginning of the school year. Please describe your school's current schedule.
 - a. (If the schedule has changed) When did the schedule change?
- **3.** What platform(s) do you use to facilitate online learning?
 - a. How are the platforms working for you?
- 4. What does a typical class period of synchronous learning look like?
- **5.** Do you assign any asynchronous work? If so, please describe the asynchronous work you assign.
 - a. What percentage of the asynchronous work do students generally complete?
- **6.** How, if at all, are you modifying modules for online learning?
- 7. How, if at all, do you measure student engagement and/or attendance?
- **8.** What strategies do you use to engage students in online learning?
- **9.** What strategies do you or support staff members at your school use to reach students who are not engaging in online learning?
- **10.** What strategies do you use to facilitate online discussions?
 - a. How well are the online discussions going? Do you have suggestions for successfully facilitating online discussions?



- 11. What support do students who have IEPs receive during distance learning?
- **12.** What has your grading policy been this school year? How does this policy compare to your grading policy for in-person learning?

Teaching Practice

- **13.** How are your students using learning goals this school year?
- **14.** Please describe your process for teaching writing this school year.

Professional Learning

- **15.** How, if at all, are your coaching sessions supporting your implementation of the ERWC this school year? Are there any ways in which the coaching sessions could be improved?
- **16.** How, if at all, are your ERWC-focused community of practice meetings supporting your implementation of the ERWC this school year? Are there any ways in which the community of practice meetings could be improved?
- 17. What professional learning, if any, did you receive for facilitating online learning?
- 18. What technical support, if any, do you receive for facilitating online learning?

Other

- **19.** If you could make one recommendation/suggestion to the CSU to improve the ERWC, what would it be?
- **20.** Is there anything else you would like to add that would help WestEd understand your experience teaching the ERWC?

Evaluation Year—Grade 11 and 12 Comparison Course

Background

1. How is the school year going so far?

Curriculum

- 2. What curriculum are you using?
- 3. How, if at all, are you modifying the curriculum for online learning?
- **4.** Please describe the writing assignments that students complete in your English 11 course.
- 5. How much focus is there on rhetorical analysis in this course?
- **6.** Approximately how much of the curriculum do you cover when learning is in person? Approximately how much of the curriculum do you anticipate getting through this year?



Online Learning

- **7.** Please describe your school's schedule for online or hybrid learning at the beginning of the school year. Please describe your school's current schedule.
 - a. (If the schedule has changed) When did the schedule change?
- **8.** What platform(s) do you use to facilitate online learning?
 - a. How are the platforms working for you?
- 9. What does a typical class period of synchronous learning look like?
- **10.** Do you assign any asynchronous work? If so, please describe the asynchronous work you assign.
 - a. What percentage of the asynchronous work do students generally complete?
- 11. How, if at all, do you measure student engagement and/or attendance?
- 12. What strategies do you use to engage students in online learning?
- **13.** What strategies do you or support staff members at your school use to reach students who are not engaging in online learning?
- **14.** What strategies and/or platforms do you use to facilitate online discussions?
 - a. How well are the online discussions going? Do you have suggestions for successfully facilitating online discussions?
- **15.** What support do students with IEPs receive during distance learning?
- **16.** What has your grading policy been this school year? How does this policy compare to your grading policy for when learning is in person?

Professional Learning

- 17. What professional learning, if any, did you receive for facilitating online learning?
- **18.** What technical support, if any, do you receive for facilitating online learning?

Other

19. Is there anything else you would like to share regarding your experience teaching the English 11 course?



Appendix F. ERWC Community of Practice Log

Pilot Year 1, Pilot Year 2, and Evaluation Year

- 1. School
- 2. Date of CoP Meeting
- 3. Meeting Start Time
- 4. Meeting End Time
- **5.** Participants (including coaches)
- 6. What topics did you discuss or what activities did you do during your ERWC CoP meeting?
- 7. What successes with the curriculum did you and your members discuss at the meeting?
- 8. What challenges with the curriculum did you and your members discuss at the meeting?
- **9.** Are there any concerns or needs related to the curriculum, coaching, or CoP that you and your members would like to communicate at this time?



Appendix G. ERWC Coaching Log and Reflection

Pilot Year 1

- Coach
- 2. Date
- 3. Teachers coached this round
- **4.** Considering the planning conversations, coaching visits, and reflection conversations with the teachers:
 - a. What are your additional thoughts about the lessons and teachers' next steps?
 - b. What went well during the overall coaching process?
 - c. What challenges, if any, did you experience during the coaching cycles?
 - d. What are your next steps as a coach? What next steps did you communicate about with the teachers?
 - e. What support do you need in order to coach the teachers successfully?

Pilot Year 2

- 1. Coach
- 2. Date
- Teachers coached this round
- **4.** What went well during the overall coaching process?
- 5. What challenges, if any, did you experience during the coaching cycle?
- **6.** What are your next steps as a coach?
- **7.** What support, if any, would you like?
- **8.** Do you have any additional thoughts, questions, or concerns?



Evaluation Year

- 1. Coach
- 2. Date
- **3.** Which teacher(s) did you coach this round?
- **4.** What was the format of your coaching sessions? (Choices: Online, In Person, Hybrid [In Person and Online])
- **5.** Please describe what you discussed and/or the activities you did during the coaching sessions.
- **6.** What were your areas of focus during the coaching sessions (e.g., inquiry-based discussions, modeling, adapting modules for online instruction, etc.)?
- **7.** What went well during the coaching process?
- 8. What challenges, if any, did you experience during the coaching process?
- 9. Do you have any additional thoughts, questions, or concerns?



Appendix H. Student Focus Group Protocol

Pilot Year 1

Background

1. What skills have you been learning in the ERWC?

Reading

- 2. What percentage of the texts that you are assigned are you actually reading?
- **3.** Do you usually read individually, in groups, or as a class?
- 4. How much do you read at home for your ERWC class?
- **5.** What reading strategies have you learned in your ERWC class? How have you applied those strategies to your reading?

Writing

- **6.** Please describe the writing assignments you complete in your ERWC class.
- **7.** What writing strategies have you learned in your ERWC class? How have you applied those strategies to your writing?

Lifelong Skills

- **8.** What has been difficult about tasks and texts in the module? When you come across a difficult task or text, what do you do?
- **9.** Where do you see yourself using these skills and this knowledge again?
- 10. What is your understanding of the term "learning goal"? What impact have learning goals had on your learning in ERWC? Can you provide an example of a learning goal you have set in your ERWC class? How do you know whether you are making progress toward mastering your learning goals?
- 11. What is a rhetorical situation? How would you describe the impact that the ERWC has had on your interest in exploring ideas more deeply through discussion and writing? How well do you feel the course has prepared you to communicate in different settings (e.g., other classes, the workplace, home, college, etc.)?



12. Have you had any "aha moments" when something finally clicked? If so, what led to that moment?

Student Voice

- **13.** What kinds of opportunities do you have to work with classmates? Please explain. (Probe for work in pairs, small groups, and whole-class discussions.)
- **14.** How often does your teacher give you opportunities to share your thoughts, opinions, and ideas in your ERWC class? How comfortable do you feel sharing your thoughts, opinions, and ideas in your ERWC class? Please explain.

Class Comparison

- **15.** How does your experience in ERWC differ from your experience in other English classes you have taken? How does the amount of reading and writing differ? How does the level of difficulty differ?
- **16.** Compared to other English classes that you have taken, how interested in and engaged do you feel with the course readings and the course overall? Please explain.

Recommendations/Other Comments

- **17.** Do you have any suggestions for your teachers or the developers of the curriculum that could help improve your experiences or future students' experiences with the ERWC?
- 18. Is there anything else you would like to share regarding your experience with the ERWC?

Pilot Year 2

Background

1. What skills have you been learning in the ERWC?

Reading

- **2.** Do you usually read individually, in groups, or as a class?
- 3. How much do you read at home for your ERWC class?
- **4.** What percentage of the texts are you actually reading?
- **5.** What reading strategies have you learned in your ERWC class? How have you applied those strategies to your reading?

Writing

- **6.** Please describe the writing assignments you complete for your ERWC class.
- **7.** What writing strategies have you learned in your ERWC class? How have you applied those strategies to your writing?



Lifelong Skills

- **8.** What has been difficult about tasks and texts in the ERWC? When you come across a difficult task or text, what do you do?
- **9.** What is a rhetorical situation? How would you describe the impact that the ERWC has had on your interest in exploring ideas more deeply through discussion and writing? How well do you feel the course has prepared you to communicate in different settings (e.g., other classes, the workplace, home, college, etc.)?
- **10.** Where do you see yourself using these skills and this knowledge again?
- 11. What is your understanding of the term "learning goal"? What impact have learning goals had on your learning in ERWC? Can you provide an example of a learning goal you have set in your ERWC class? How do you know whether you are making progress toward mastering your learning goals?
- **12.** Have you had any "aha moments" when something finally clicked? If so, what led to that moment?

Student Voice

- **13.** What kinds of opportunities do you have to work with classmates? Please explain. (Probe for work in pairs, small groups, and whole-class discussions.)
- **14.** How often does your teacher give you opportunities to share your thoughts, opinions, and ideas in your ERWC class? How comfortable do you feel sharing your thoughts, opinions, and ideas in your ERWC class? Please explain.

Class Comparison

- **15.** How does your experience in ERWC differ from your experience in other English classes you have taken? How does the amount of reading and writing differ? How does the level of difficulty differ?
- **16.** Compared to other English classes that you have taken, how interested in and engaged do you feel with the course readings and the course overall? Please explain.

Recommendations/Other Comments

- **17.** Do you have any suggestions for your teachers or the developers of the curriculum that could help improve your experiences or future students' experiences with the ERWC?
- 18. Is there anything else you would like to share regarding your experience with the ERWC?



Appendix I. Midyear Survey Protocols

Pilot Year 2—ERWC⁸⁰

- Name (WestEd will keep your name confidential)
- School
- 3. How often have you engaged in the following activities this school year? (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily)
 - a. Provide explicit instruction on reading comprehension strategies
 - b. Provide explicit instruction on writing strategies
 - c. Modify instruction based on assessment of students' comprehension of reading materials or performance on writing tasks
 - d. Provide explicit instruction on behaviors that promote student-to-student discussions
 - e. Model behaviors that foster productive student-to-student discussions
- **4.** How often have your students engaged in the following activities this school year? (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily)
 - a. Read assigned texts silently or out loud in class
 - b. Write about texts they read
 - c. Discuss the meaning of texts with partners or in small groups
 - d. Critique and challenge one another's ideas or work
 - e. Edit or revise their own or one another's writing

⁸⁰ Midyear surveys were not administered in Pilot Year 1.



- 5. Please indicate how often you tend to assign reading and other homework outside of class and also indicate the percentage of students who typically complete the tasks that are assigned outside of class. (Note: Only include tasks that students were not given time to complete in class.) (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily; Choices: 0%, 25%, 50%, 75%, 100%)
 - a. Reading
 - b. Homework
- **6.** If teachers indicate they "Never" assign reading or homework to be done outside of class: Why do you choose not to assign reading and/or other homework to be done outside of class?
- 7. If teachers indicate they assign reading and/or other homework to be done outside of class but 50 percent or less of students complete either task: What may be some of the reasons why students do not complete reading and/or other homework outside of class?
- **8.** If teachers indicate they assign reading and/or other homework to be done outside of class about once a week or more often and 75% or more of students complete either task: How do you successfully get students to complete reading and/or other homework outside of class?
- **9.** What strategies or resources have you used to elicit strong student-to-student discussions?
- **10.** How many of each of the following culminating writing assignments have students completed in your class this school year?
 - a. Argumentative (Persuasive) texts
 - b. Descriptive texts
 - c. Expository texts
 - d. Narrative texts
 - e. Other (fill in the blank)
- **11.** Which of the following activities (if any) do you tend to skip in the Writing Rhetorically section of modules? Please check all that apply.
 - a. Making Choices About Learning Goals
 - b. Making Choices as You Write
 - c. Analyzing Your Draft Rhetorically
 - d. Gathering and Responding to Feedback
 - e. Editing Your Draft
 - f. Preparing Your Draft for Publication
 - g. Reflection on Your Writing Process



- **12.** Please explain why you tend to skip the following activities. (Pull answers forward from the previous question.)
- **13.** In which aspect(s) of writing do you feel your students need the most support?
- **14.** Please indicate the extent to which you agree or disagree with the following statements. (Choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)
 - a. The 2019 Summer Institute supported my implementation of the ERWC 3.0.
 - b. My coach has supported my implementation of the ERWC 3.0.
 - c. My CoP meetings have supported my implementation of the ERWC 3.0.
 - d. I see myself as a writer; as such, I am able to support my students with insights and experiences that are fueled by my "insider's knowledge" of writing.
 - e. The ERWC 3.0 prepares students for college.
 - f. The ERWC 3.0 prepares students for their future careers.
 - g. I would like to continue teaching the ERWC 3.0 after I finish participating in the Investing in Innovation (i3) Validation grant.

Pilot Year 2—Grade 11 Comparison

- 1. Name (WestEd will keep your name confidential)
- 2. School
- 3. How many years have you previously taught English 11?
- **4.** Please select the curriculum or curricula that you are using this school year for your regular English 11 course.
 - a. CollegeBoard: Springboard
 - b. Holt: Literature and Language Arts
 - c. Houghton Mifflin Harcourt: Collections
 - d. McGraw-Hill: StudySync
 - e. Savvas: MyPerspectives
 - f. Curriculum created by my district (including Rigorous Curriculum Design)
 - g. Curriculum created by teachers at my school
 - h. Curriculum created by me
 - i. Other (fill in the blank)
- 5. Please indicate the percentage of the total curriculum you anticipate getting through this school year. (Pull curriculum or curricula from previous answer. Choices: 0%, 25%, 50%, 75%, 100%)



- **6.** Roughly what percentage of the curriculum focuses on rhetorical analysis? (Choices: 0%, 25%, 50%, 75%, 100%)
- 7. How often have you engaged in the following activities this school year? (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily)
 - a. Provide explicit instruction on reading comprehension strategies
 - b. Provide explicit instruction on writing strategies
 - c. Modify instruction based on assessment of students' comprehension of reading materials or performance on writing tasks
 - d. Provide explicit instruction on behaviors that promote student-to-student discussions
 - e. Model behaviors that foster productive student-to-student discussions
- 8. How often have your students engaged in the following activities this school year? (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily)
 - a. Read assigned texts silently or out loud in class
 - b. Write about texts they read
 - c. Discuss the meaning of texts with partners or in small groups
 - d. Critique and challenge one another's ideas or work
 - e. Edit or revise their own or one another's writing
- 9. Please indicate how often you tend to assign reading and other homework outside of class and also indicate the percentage of students who typically complete the tasks that are assigned outside of class. (Note: Only include tasks that students were not given time to complete in class.) (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily; Choices: 0%, 25%, 50%, 75%, 100%)
 - a. Reading
 - b. Homework
- 10. If teachers indicate they "Never" assign reading or homework to be done outside of class: Why do you choose not to assign reading and/or other homework to be done outside of class?



- 11. If teachers indicate they assign reading and/or homework to be done outside of class, but 50% or less of students complete either task: What may be some of the reasons why students do not complete reading and/or other homework outside of class?
- 12. If teachers indicate they assign reading or homework to be done outside of class about once a week or more often and 75% or more of students complete either task: How do you successfully get students to complete reading and/or other homework outside of class?
- **13.** What strategies or resources have you used to elicit strong student-to-student discussions?
- **14.** How many of each of the following writing assignments have students completed in your class this school year?
 - a. Argumentative (Persuasive) texts
 - b. Descriptive texts
 - c. Expository texts
 - d. Narrative texts
 - e. Other (fill in the blank)
- **15.** In which aspect(s) of writing do you feel your students need the most support?
- **16.** Is there anything else you would like to share regarding the teaching of your grade 11 English class?

Evaluation Year—ERWC

Background

- 1. First and Last Name
- 2. School
- **3.** Grade
 - a. 11th
 - b. 12th
 - c. 11th & 12th
- **4.** What is your highest level of education?
 - a. Bachelor's Degree
 - b. Master's Degree
 - c. Doctoral Degree
- 5. How many total years of teaching experience do you have?



- **6.** How many years of experience do you have teaching the ERWC?
- **7.** Which LMS do you use?
 - a. Canvas
 - b. Google
 - c. Blackboard
 - d. Schoology
 - e. Moodle
 - f. Other

Reading

- 8. How much per week do your students read on average? Please include the reading done both within class and outside of class. (Choices: 0–1 hours, 2–3 hours, 4–5 hours, 6 or more hours)
- **9.** Please indicate your level of agreement with the following statements (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students find the readings in this curriculum to be interesting.
 - b. Students are able to relate to the texts that they read in this class.
 - c. Students often read independently.
 - d. Students think deeply about the content of texts.
 - e. Students enjoy discussing texts with peers.
 - f. The reading exercises in the curriculum are adequately scaffolded.

Student Writing

- 10. How many pages per week do students write on average? Please include all types of writing (e.g, quick writes, essays, etc.). (Choices: 0 pages, 1–3 pages, 4–6 pages, 7–9 pages, 10–12 pages, 13–15 pages, More than 15 pages)
- **11.** Please indicate your level of agreement with the following statements (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students find the writing topics in this curriculum to be interesting.
 - b. Students often write independently.
 - c. Students think deeply about their writing.
 - d. Students enjoy discussing their writing with peers.
 - e. Students spend adequate time revising and editing their writing.
 - f. The writing exercises in the curriculum are adequately scaffolded.



Student Engagement and Skills

- **12.** Please indicate your level of agreement with the following statement. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students are engaged in the curriculum.
 - b. Students work hard in this class because they are interested in the topics.
 - c. Students draw on their own experiences to make connections to content.
 - d. Students have high-quality discussions.
 - e. Students are able to communicate flexibly based on the situation.
 - f. Students are developing confidence in their capacity to read and write.
 - g. Students are developing strategies for monitoring their own progress as they learn.
 - h. Students are exploring their positions relative to each topic.
 - i. Students will be able to use skills they learned in my English class in other settings.

Teacher Perspectives

- **13.** Please indicate your level of agreement with the following statement. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. I am comfortable teaching reading.
 - b. I am comfortable teaching writing.
 - c. I prefer to teach reading more than writing.
 - d. I prefer to teach writing more than reading.
 - e. I see myself as a reader.
 - f. I see myself as a writer.

Professional Learning

- **14.** Please indicate your level of agreement with the following statement (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. The ERWC Summer Institute supported my teaching of the curriculum.
 - b. My ERWC coach supported my teaching of the curriculum.
 - c. My school-based CoP meetings supported my teaching of the curriculum.

Curriculum

- **15.** Please indicate your level of comfort with teaching the curriculum in each year of the study.
 - a. Year 1 (2018/19) (if applicable)
 - b. Year 2 (2019/20)



- c. Year 3 (2020/21)
- **16.** How does the rigor of your grading this year compare to the rigor of your grading when learning is fully in person? (Choices: Much easier, Slightly easier, About the same, Slightly harder, Much harder)

Other

17. Is there anything else you would like to share regarding your experience in the ERWC i3 Validation grant? (Optional)

Evaluation Year—Comparison

Background

- 1. What is your highest level of education?
 - a. Bachelor's Degree
 - b. Master's Degree
 - c. Doctoral Degree
- 2. How many total years of teaching experience do you have?
- **3.** How many years of experience do you have teaching the comparison English 11 or English 12 course?
- **4.** Which curriculum did your district adopt for your English course?
- 5. If your district purchased a curriculum, what year was it purchased? (Leave blank if you don't know.)
- **6.** Please estimate the percentage of the adopted curriculum that you use for your English course. (This will be kept confidential.)
- **7.** Which LMS do you use?
 - a. Canvas
 - b. Google
 - c. Blackboard
 - d. Schoology
 - e. Moodle
 - f. Other ____

Reading

8. How much per week do your students read on average? Please include the reading done both within class and outside of class. (Choices: 0–1 hours, 2–3 hours, 4–5 hours, 6 or more hours)



- **9.** Please indicate your level of agreement with the following statements. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students find the readings in this curriculum to be interesting.
 - b. Students are able to relate to the texts that they read in this class.
 - c. Students often read independently.
 - d. Students think deeply about the content of texts.
 - e. Students enjoy discussing texts with peers.
 - f. The reading exercises in the curriculum are adequately scaffolded.

Student Writing

- 10. How many pages per week do students write on average? Please include all types of writing (e.g, quick writes, essays, etc.). (Choices: 0 pages, 1–3 pages, 4–6 pages, 7–9 pages, 10–12 pages, 13–15 pages, More than 15 pages)
- **11.** Please indicate your level of agreement with the following statements (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students find the writing topics in this curriculum to be interesting.
 - b. Students often write independently.
 - c. Students think deeply about their writing.
 - d. Students enjoy discussing their writing with peers.
 - e. Students spend adequate time revising and editing their writing.
 - f. The writing exercises in the curriculum are adequately scaffolded.

Student Engagement and Skills

- **12.** Please indicate your level of agreement with the following statement. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students are engaged in the curriculum.
 - b. Students work hard in this class because they are interested in the topics.
 - c. Students draw on their own experiences to make connections to content.
 - d. Students have high-quality discussions.
 - e. Students are able to communicate flexibly based on the situation.
 - f. Students are developing confidence in their capacity to read and write.
 - g. Students are developing strategies for monitoring their own progress as they learn.
 - h. Students are exploring their positions relative to each topic.
 - i. Students will be able to use skills they learned in my English class in other settings.



Teacher Perspectives

- **13.** Please indicate your level of agreement with the following statement. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. I am comfortable teaching reading.
 - b. I am comfortable teaching writing.
 - c. I prefer to teach reading more than writing.
 - d. I prefer to teach writing more than reading.
 - e. I see myself as a reader.
 - f. I see myself as a writer.

Other

14. Is there anything else you would like to share regarding your experience in the ERWC i3 Validation grant? (Optional)



Appendix J. End-of-Year Survey Protocols

Pilot Year 1—ERWC Only

- First and Last Name
- 2. School
- 3. ERWC Grade(s)
- **4.** Please check the box for each module you taught or plan to teach this school year. Please leave the box blank for modules that you had planned to teach but were not able to. (All modules are listed.)
- 5. Please indicate the order in which you taught or plan to teach the modules.
- **6.** We understand that many teachers will not be able to teach as many modules as originally expected. If you did not teach or do not plan to teach six full-length modules and five mini-modules, please give specific reasons for not doing so.
- **7.** Please indicate the extent to which your students grew academically in each of the following areas. (Choices: Not at all, Slightly, Moderately, Considerably, A great deal)
 - a. Reading
 - b. Writing
 - c. Listening
 - d. Speaking
- 8. Please describe how your students grew academically.
- **9.** If you taught the ERWC prior to the 2018/19 school year, please describe how the ERWC 3.0 compares to the ERWC 2.0.
- **10.** How, if at all, could your experience as a teacher in the ERWC i3 Validation grant be improved?

Pilot Year 2—ERWC

- 1. First and Last Name
- 2. School



- Grade
 - a. 11th
 - b. 12th
 - c. 11th & 12th
- **4.** Please check the box next to each module that you taught or still plan to teach this school year. (Include a checklist of modules for each grade.)
- 5. Please indicate the order in which you taught the modules. (Pull answers forward from the previous question.)
- **6.** We understand that many teachers will not be able to teach as many modules as originally expected, and this likely was compounded by the school closures this year. If you did not teach or do not plan to teach six full-length modules and five mini-modules, please give the specific reasons for not doing so.
- 7. Please list any module pairings you found to be particularly successful. Then, please indicate why they paired well and describe why they were successful. (Choices: Rhetorical concept, Text, Topic, Specific skill, Other)
- **8.** Please indicate your level of agreement with the following statements before school closures. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students found the readings in this curriculum to be interesting.
 - b. Students were engaged in the curriculum.
 - c. My English class was inquiry based.
 - d. When students came across a difficult task, they did their best to complete it.
 - e. Students were motivated to do well in my English class.
 - f. Students' perspectives changed as a result of my English class.
 - g. Students will be able to use skills they learned in my English class in other classes.
 - h. My ERWC coach supported my teaching of the curriculum.

Distance Learning

The following questions are about distance learning.

- 9. What percentage of the time was instruction synchronous (in real time)? (Choices: 0%, 25%, 50%, 75%, 100%)
- **10.** How often did your students have opportunities to engage in the following activities during school closures (asynchronously or synchronously)? (Choices: Never, Weekly, 2–3 times per week, Daily or almost daily)
 - a. View online instruction
 - b. Read or listen to texts



- c. Write about texts they read
- d. Participate in online discussions
- e. Present work through a video or audio platform
- f. Receive feedback on work from the teacher
- g. Attend office hours
- **11.** What percentage of your students engaged in the distance learning activities in a given week? (Choices: 0%, 25%, 50%, 75%, 100%)
- 12. What aspect of distance learning was most challenging for you?
- **13.** What aspect of distance learning was most challenging for your students?
- **14.** Please describe any strategies you used to motivate students to engage in distance learning.

Reading and Writing

The following questions are about reading and writing instruction.

- **15.** Before school closures, how much per week were students reading on average? Please include the reading done both within class and outside of class. (Choices: None, 0–1 hours, 1–2 hours, 2–3 hours, 3–4 hours, 4–5 hours, More than 5 hours)
- **16.** Before school closures, how many pages per week were students writing on average? Please include all types of writing (e.g, quick writes, essays, etc.). (Choices: 0 pages, 1–2 pages, 3–6 pages, 7–10 pages, 11–15 pages, 16–20 pages, More than 20 pages)
- **17.** How often do students receive the following types of feedback on their culminating tasks? (Choices: Always, Sometimes, Never)
 - a. Before students submit a final draft
 - i. Comments and/or ratings based on a rubric
 - ii. One-on-one writing conferences with students
 - iii. Written peer feedback
 - iv. Written teacher feedback
 - b. After students submit a final draft
 - i. Comments that include recommendation(s) for improvement
 - ii. Letter grades on final drafts
 - iii. Comments and/or ratings based on a rubric
- **18.** Before you launch into teaching a module, how do you plan your instruction to prepare your students for culminating writing tasks?



19. Do you supplement ERWC writing activities with writing activities of your own that you know your students will need to complete the culminating task more successfully? If so, please provide an example.

Other

20. Is there anything else you would like to share regarding your experience in the ERWC i3 Validation grant? (Optional)

Pilot Year 2—Grade 11 Comparison Course

- 1. First and Last Name
- 2. School
- **3.** How many years have you taught English? (Include dropdown listing with numbers 1–40)
- **4.** What is your highest level of education?
 - a. Bachelor's Degree
 - b. Master's Degree
 - c. Doctoral Degree
- **5.** Please indicate your level of agreement with the following statements before school closures. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students found the readings in this curriculum to be interesting.
 - b. Students were engaged in the curriculum.
 - c. My English class was inquiry based.
 - d. When students came across a difficult task, they did their best to complete it.
 - e. Students were motivated to do well in my English class.
 - f. Students' perspectives changed as a result of my English class.
 - g. Students will be able to use skills they learned in my English class in other classes.

Distance Learning

- **6.** What percentage of the time was instruction synchronous (in real time)? (Choices: 0%, 25%, 50%, 75%, 100%)
- 7. How often did your students have opportunities to engage in the following activities during school closures (asynchronously or synchronously)? (Never, Weekly, 2–3 times per week, Daily or almost daily)
 - a. View online instruction
 - b. Read or listen to texts



- c. Write about texts they read
- d. Participate in online discussions
- e. Present work through a video or audio platform
- f. Receive feedback on work from the teacher
- g. Attend office hours
- **8.** What percentage of your students engaged in the distance learning activities in a given week? (Choices: 0%, 25%, 50%, 75%, 100%)
- 9. What aspect of distance learning was most challenging for you?
- **10.** What aspect of distance learning was most challenging for your students?
- **11.** Please describe any strategies you used to motivate students to engage in distance learning.

Reading and Writing

- 12. Before school closures, how much per week were students reading on average? Please include the reading done both within class and outside of class. (Choices: None, 0–1 hours, 1–2 hours, 2–3 hours, 3–4 hours, 4–5 hours, More than 5 hours)
- **13.** Before school closures, how many pages per week were students writing on average? Please include all types of writing (e.g., quick writes, essays, etc.). (Choices: 0 pages, 1–2 pages, 3–6 pages, 7–10 pages, 11–15 pages, 16–20 pages, More than 20 pages)
- **14.** How often do students receive the following types of feedback on their final writing task(s) for each unit? (Choices: Always, Sometimes, Never)
 - a. Before students submit a final draft
 - i. Comments and/or ratings based on a rubric
 - ii. One-on-one writing conferences with students
 - iii. Written peer feedback
 - iv. Written teacher feedback
 - b. After students submit a final draft
 - i. Comments that include recommendation(s) for improvement
 - ii. Letter grades on final drafts
 - iii. Comments and/or ratings based on a rubric
- **15.** Before you launch into teaching a unit, how do you plan your instruction to prepare your students for the final writing task(s)?



Other

16. Is there anything else you would like to share regarding your experience in the ERWC i3 Validation grant? (Optional)

Evaluation Year—ERWC

Background

- 1. First and Last Name
- 2. School
- **3.** Grade
 - a. 11th
 - b. 12th
 - c. 11th & 12th

Modules Taught

- **4.** Please check the box next to each module that you taught or still plan to teach this school year. (Include a check list of modules for each grade.)
- **5.** Please indicate the order in which you taught the modules. (Pull answers forward from the previous question.)
- 6. We understand that many teachers will not be able to teach as many modules as originally expected, and this likely was compounded by the school closures this year. If you did not teach or do not plan to teach six full-length modules and five mini-modules, please give the specific reasons for not doing so.

Views of Course

- 7. Please indicate your level of agreement with the following statements regarding your English course this school year. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students found the readings in this curriculum to be interesting.
 - b. Students were engaged in the curriculum.
 - c. When students came across a difficult task, they did their best to complete it.
 - d. Students were motivated to do well in my English class.
 - e. Students' perspectives changed as a result of my English class.
 - f. Students will be able to use skills they learned in my English class in other classes.
 - g. The ERWC 3.0 is a strong curriculum.
 - h. I enjoy teaching the ERWC 3.0.
 - i. The ERWC 3.0 prepares students for college.



- j. The ERWC 3.0 prepares students for their future careers.
- **8.** Which activities do you tend to skip while teaching the ERWC online? Please select all that apply. (List all activities.)
- **9.** Please describe why you tend to skip these activities while teaching the ERWC online. (Pull selections forward from the previous question.)
- 10. Please describe the strengths of the ERWC.
- 11. Please describe the weaknesses of the ERWC.

Pedagogical Practice

- **12.** Please indicate the extent to which you agree with the following statements. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Teaching the ERWC has increased...
 - i. the amount of collaboration in my classroom.
 - ii. the depth of collaboration in my classroom.
 - iii. the amount of student choice in my classroom.
 - iv. my ability to support students to draw on their cultural backgrounds.
 - v. my ability to release responsibility to students.
 - vi. my ability to support students to track progress toward their goals.
 - vii. my ability to implement strategies to support English language learners.
 - viii. my ability to integrate Universal Design for Learning (UDL).

Experience With Grant

- **13.** Please indicate the extent to which you agree with the following statements regarding your experience in the ERWC i3 Validation grant. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. I enjoyed participating in the ERWC i3 Validation grant.
 - b. Participating in the ERWC i3 Validation grant was stressful.
 - c. Participating in the ERWC i3 Validation grant supported my professional growth.
 - d. My implementation of the curriculum has improved throughout the ERWC i3 Validation grant.
 - e. I have collaborated more with my colleagues because of my participation in the ERWC i3 Validation grant.
 - f. I would like to continue teaching the ERWC 3.0 after I finish participating in the Investing in Innovation (i3) Validation grant.



Other

- **14.** Did you administer the final assessment for the ERWC study (either the Smarter Balanced ELA Summative Assessment or the Interim Comprehensive Assessment) mostly online or mostly in person?
 - a. Mostly online
 - b. Mostly in person
- 15. What aspect of your participation in the i3 grant did you find most valuable?
- **16.** Is there anything else you would like to share regarding your experience in the ERWC i3 Validation grant? (Optional)

Evaluation Year—Grades 11 and 12 Comparison Course

Background

- 1. First and Last Name
- 2. School
- **3.** Grade(s)
 - a. 11th grade
 - b. 12th grade
 - c. 11th and 12th grade

Curriculum

- **4.** Please indicate your level of agreement with the following statements. (Choices: Strongly disagree, Disagree, Neutral, Agree, Strongly agree)
 - a. Students found the readings in this curriculum to be interesting.
 - b. Students were engaged in the curriculum.
 - c. When students came across a difficult task, they did their best to complete it.
 - d. Students were motivated to do well in my English class.
 - e. Students' perspectives changed as a result of my English class.
 - f. Students will be able to use skills they learned in my English class in other classes.
 - g. The curriculum that I use is a strong curriculum.
 - h. I enjoy teaching the curriculum.
 - i. The curriculum that I use prepares students for college.
 - j. The curriculum that I use prepares students for their future careers.
- **5.** Please indicate the percentage of the total curriculum you anticipate getting through this school year. (Choices: 0%, 25%, 50%, 75%, 100%)



- **6.** Please describe the strengths of the curriculum you use.
- 7. Please describe the weaknesses of the curriculum you use.

Other

- **8.** Did you administer the final assessment for the ERWC study (either the Smarter Balanced ELA Summative Assessment or the Interim Comprehensive Assessment) mostly online or mostly in person?
 - a. Mostly online
 - b. Mostly in person
- **9.** Is there anything else you would like to share regarding your experience in the ERWC i3 Validation grant? (Optional)



Appendix K. Student Survey Protocol

Evaluation Year—ERWC and Comparison English Courses

- Your Name
- 2. Your English Teacher's Name
- 3. School Name
- **4.** Please indicate how much you agree or disagree with the following statements. (Choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)
 - a. I enjoy my English class.
 - b. I am generally interested in the texts and topics covered in my English class.
 - c. I read texts that I can relate to.
 - d. I feel successful in my English class.
 - e. My English class is challenging.
 - f. Future students will benefit from my English class.
 - g. I feel comfortable sharing my thoughts and opinions in class.
 - h. I can listen to others with an open mind.
 - i. I wish more of my classmates would participate in discussions.
 - j. My English class has caused me to change my perspective on a controversial topic.
 - k. When I come across a difficult task, I try my best to complete it.
 - I. I will be able to use what I have learned in my English class in other classes.
- 5. How often have you completed the following activities this school year? (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily)
 - a. Read assigned texts silently or out loud in class
 - b. Write about texts you read
 - c. Discuss the meaning of texts with partners or in small groups



- d. Critique or challenge one another's ideas or work
- e. Edit or revise your writing or another student's writing
- **6.** Which of the following writing skills have you learned in this year's English class?
 - a. Audience address: communicating ideas to specific audiences (e.g., instructor, peers, family members, etc.)
 - b. Purpose: focusing on specific writing purposes (persuading, informing, expressing, etc.)
 - c. Thesis: articulating a central idea or position
 - d. Organization: sequencing content logically
 - e. Evidence: using evidence to support an idea or position
 - f. Counterarguments: addressing opposing perspectives
 - g. Paragraphing: constructing cohesive, structured, and focused paragraphs
 - h. Drafting and revising: writing multiple drafts
 - i. Peer response: responding constructively to peers' drafts
 - j. Research: locating, evaluating, and using research material
 - k. Citation: citing sources using a consistent format
 - I. Grammar and usage: controlling such features as mechanics, sentence structure, and spelling
- 7. Which of the following writing skills do you think are your weakest? (Choose up to three.)
 - a. Audience address: communicating ideas to specific audiences (e.g., instructor, peers, family members, etc.)
 - b. Purpose: focusing on specific writing purposes (persuading, informing, expressing, etc.)
 - c. Thesis: articulating a central idea or position
 - d. Organization: sequencing content logically
 - e. Evidence: using evidence to support an idea or position
 - f. Counterarguments: addressing opposing perspectives
 - g. Paragraphing: constructing cohesive, structured, and focused paragraphs
 - h. Drafting and revising: writing multiple drafts
 - i. Peer response: responding constructively to peers' drafts
 - j. Research: locating, evaluating, and using research material
 - k. Citation: citing sources using a consistent format



- I. Grammar and usage: controlling such features as mechanics, sentence structure, and spelling
- **8.** Which of the following writing skills do you think are your weakest? (Choose up to three.)
 - a. Audience address: communicating ideas to specific audiences (e.g., instructor, peers, family members, etc.)
 - b. Purpose: focusing on specific writing purposes (persuading, informing, expressing, etc.)
 - c. Thesis: articulating a central idea or position
 - d. Organization: sequencing content logically
 - e. Evidence: using evidence to support an idea or position
 - f. Counterarguments: addressing opposing perspectives
 - g. Paragraphing: constructing cohesive, structured, and focused paragraphs
 - h. Drafting and revising: writing multiple drafts
 - i. Peer response: responding constructively to peers' drafts
 - j. Research: locating, evaluating, and using research material
 - k. Citation: citing sources using a consistent format
 - I. Grammar and usage: controlling such features as mechanics, sentence structure, and spelling
- **9.** When you are reading a difficult text, what do you do to help you understand what you are reading?
- 10. How often does your teacher assign reading or homework to be completed outside of class? (Note: Only include tasks that you were not given time in class to complete.) (Choices: Never, About once a month, About once a week, 2–3 times a week, Daily or almost daily)
 - a. Reading
 - b. Homework
- 11. (If students indicate they are assigned any reading or homework) How much of the assigned reading or homework do you typically complete? (Choices: 0%, 25%, 50%, 75%, 100%)
 - a. Reading
 - b. Homework
- **12.** (If students indicate they complete 50% or less of reading or homework) What is preventing you from completing your homework?
- 13. What is most motivating for you to do well in your English class?



- a. I enjoy the course.
- b. I want to get a good grade.
- c. I want to graduate.
- d. I want to make my family members proud.
- e. I want to make my teacher or another adult proud.
- f. Other
- g. N/A—I don't care whether or not I do well in my English class.
- **14.** What are your plans for right after high school? Please check all that apply.
 - a. Attend a community college
 - b. Attend a 4-year college or university
 - c. Attend trade school
 - d. Go on a mission trip
 - e. Join the military
 - f. Take a gap year
 - g. Work part-time
 - h. Work full-time
 - i. Other (fill in the blank)
- 15. If you could make one recommendation to improve your English class, what would it be?



Appendix L. Impact Evaluation

Grade 11 Power Analyses

After running the regression analyses for both study samples, the minimum detectable effect sizes (MDESs) were calculated to measure the power of the analyses. Using a two-sided hypothesis test with 80 percent power and .05 alpha, a multiplier of 2.8 on the standard error was used to calculate the MDES for the two outcome measures (Bloom, 1995). Using the standard errors of the impact estimate shown in Tables 6.8 and 6.9 in the main report, the MDES of the Non-PT ICA analysis is .132 and the MDES of the Summative Assessment analysis is 12.454.

Grade 11 Sensitivity Analysis

As a sensitivity analysis, an ordinary least squares regression on complete cases was performed to investigate the robustness of the results presented above with regard to the treatment of missing data. Table L.1 shows the estimated coefficients on the ERWC assignment variable for the complete case sensitivity analysis. For ease of comparison, the table also includes the estimates for the main impact analysis (presented in Tables 6.8 and 6.9 in the main report). Results from the complete case sensitivity analysis do not change the original results—there is still a positive and statistically significant impact based on the Non-PT ICA analysis and no statistically significant impact based on the Summative Assessment analysis.



Table L.1 Sensitivity Analysis—Complete Case Analysis

Regression Analysis	Number of observations	Coefficient	Standard Error	t-Statistic	p-Value
Non-PT ICA Main Impact Estimate	1,122	.129***	.047	2.75	.006
Non-PT ICA Complete Case	621	.165***	.058	2.83	.005
Summative Assessment Main Impact Estimate	1,855	-5.001	4.424	-1.13	.259
Summative Assessment Complete Case	1,277	-6.171	5.172	-1.19	.233

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level.

Source: Student data and Summative Assessment scores collected from the participating school districts, and Non-PT ICA data collected from Cambium Assessment

Grade 11 Exploratory Analyses

Analysis of Moderating Variables

Additional analyses were run to investigate whether assignment to the ERWC had an impact on *specific* groups of students—namely, English Learner students and students in special education. To do so, additional regression analyses were run using the same methodology and covariates as the main impact analysis but with an added interaction term between assignment to the ERWC and the specific student subgroup. A separate regression was run for the interactions for English Learner students and for students in special education (see Tables L.4, L.5, L.6, and L.7). Tables L.2 and L.3 show the total number of English learner students and students with special education status that were randomized at the beginning and how many students were still in the final study sample.



Table L.2 Sample Size—English Learners

Outcome Measure (Study Sample)	Total Randomized English Learner Students	Total English Learner Students Randomized to ERWC	Total English Learner Students Randomized to Comparison	Final Study Sample English Learner Students	Final Study Sample English Learners Assigned to ERWC	Final Study Sample English Learners Assigned to Comparison
Non-PT ICA	161	69	92	119	50	69
Summative Assessment	434	191	243	219	98	121

Note. English learner status is based on student assignment prior to entering the 2020/21 school year. Source: Student data collected from participating school districts

Table L.3 Sample Size—Special Education

Outcome Measure (Study Sample)	Total Randomized Special Ed Students	Total Special Ed Students Randomized to ERWC	Total Special Ed Students Randomized to Comparison	Final Study Sample Special Ed Students	Final Study Sample Special Ed Assigned to ERWC	Final Study Sample Special Ed Assigned to Comparison
Non-PT ICA	123	50	73	90	38	52
Summative Assessment	321	160	161	166	84	82

Note. Students' special education status is defined as students receiving special education plan prior to the 2020/21 school year.

Source: Student data collected from participating school districts



Table L.4 Impact of Assignment to ERWC for English Learner Students on the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Characteristics	Coefficient	Standard Error	t-Statistic	p-Value
ERWC	.135***	.050	2.71	.007
English Learner	.018	.105	0.17	.866
ERWC x English Learner	053	.152	-0.35	.729

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level.

Note. Table only shows the regression output relevant to the interaction analysis. The signs and statistical significance of other covariates included in this analysis remain similar to the results of the main impact analysis.

Source: Student data collected from participating school districts and Non-PT ICA data collected from Cambium Assessment

As shown in Table L.4, the coefficient on the interaction term (ERWC x English Learner) is not statistically significant—therefore, English Learner status when assigned to ERWC has no moderating effect on student achievement (Wooldridge, 2013).

Table L.5 Impact of Assignment to ERWC for Students with Special Education Status on the Grade 11 Non-Performance Task ELA/Literacy Interim Comprehensive Assessment

Characteristics	Coefficient	Standard Error	t-Statistic	p-Value
ERWC	.113**	.049	2.31	.021
Special Education	310***	.114	-2.72	.007
ERWC x Special Education	.206	.170	1.22	.224

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level. Note. Table only shows the regression output relevant to the interaction. Other covariates included in the analysis stay similar to the regression output of the main impact analysis.

Source: Student data collected from participating school districts and Non-PT ICA data collected from Cambium Assessment

As shown in Table L.5, the coefficient on the interaction term (ERWC x Special Education) is not statistically significant—therefore, special education status when assigned to ERWC has no moderating effect on student achievement.



Table L.6 Impact of Assignment to ERWC for English Learner Students on the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment

Characteristics	Coefficient	Standard Error	t-Statistic	p-Value
ERWC	-6.213	4.699	-1.32	.186
English Learner	-30.043***	9.212	-3.26	.001
ERWC x English Learner	680	12.990	-0.05	.958

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level. Note. Table only shows the regression output relevant to the interaction. Other covariates included in the analysis stay similar to the regression output of the main impact analysis.

Source: Student data and Summative Assessment scores collected from participating school districts

As shown in Table L.6, the coefficient on the interaction term (ERWC x English Learner) is not statistically significant—therefore, English Learner status when assigned to ERWC has no moderating effect on student achievement.

Table L.7 Impact of Assignment to ERWC for Students with Special Education Status on the Grade 11 Smarter Balanced ELA/Literacy Summative Assessment

Characteristics	Coefficient	Standard Error	t-Statistic	p-Value
ERWC	-6.910	4.612	-1.50	.134
Special Education	-46.471***	10.545	-4.41	<.001
ERWC x Special Education	15.895	14.469	1.10	.272

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level. Note. Table only shows the regression output relevant to the interaction. Other covariates included in the analysis stay similar to the regression output of the main impact analysis.

Source: Student data and Summative Assessment scores collected from participating school districts

As shown in Table L.7, the coefficient on the interaction term (ERWC x Special Education) is not statistically significant—therefore, special education status when assigned to ERWC has no moderating effect on student achievement.



Relationship Between Student Achievement and Teachers Reporting That They Taught All the Modules

The research team also explored the potential benefits of being assigned to ERWC and being enrolled in a classroom in which the teacher taught the curriculum with fidelity. Because no teacher in grade 11 for school year 2020/21 taught the curriculum with fidelity using the initial definition of fidelity, an alternative definition was created such that fidelity was considered to have been met if a teacher reported on the end-of-year survey having taught (or planning to teach before the end of the school year) the required modules within each category. The required modules were at least one book module, one drama module, one foundational document module, one issue module, one additional full-length module from a category of their choice, three mini-modules, and two portfolio modules.

This subsample analysis is restricted to students assigned to the ERWC and the analysis compared students who were in classrooms in which the ERWC was taught with fidelity (according to the alternative definition described in the previous paragraph) against students in ERWC classrooms in which the teacher did not teach the curriculum with fidelity.

Eleven out of 23 teachers in this analysis reported having taught the required number of modules. Table L.8 shows the number of students enrolled in these ERWC classes in which the teacher reported having taught or not taught the required modules.

Table L.8 Number of Students Enrolled in Classrooms in Which the Teacher Did or Did Not Teach the Required Modules, by Student Sample

Outcome Measure (Study Sample)	Number of Students in ERWC Classrooms in Which the Teacher Reported Teaching All of the Required Modules	Number of Students in ERWC Classrooms in Which the Teacher Reported Not Teaching All of the Required Modules	Total
Non-PT ICA	277	199	476
Summative Assessment	260	552	812

Note. Students randomly assigned to ERWC that did not enroll in an ERWC course were excluded from this table (24 Non-PT ICA students, and 68 Summative Assessment students).

Source: Student enrollment is based on fall 2020 and spring 2021 rosters information received from participating school districts



Using a regression model similar to the model used for the main impact analysis, with a binary indicator variable added to denote teachers who reported attempting to teach all of the required modules (instead of assignment to the ERWC), no statistically significant difference was found (see Table L.9).

Table L.9 Impact Analysis on Attempting Fidelity, by Student Sample

Outcome Measure (Study Sample)	Coefficient	Standard error	t-Statistic	p-value
Non-PT ICA	.021	.154	0.14	.891
Summative Assessment	18.955	15.675	1.21	.227

Note. Output based on 476 ERWC students who took the Non-PT ICA and 812 ERWC students who took the Summative Assessment. The regression analysis used the main outcome score taken in Spring 2021, with the coefficient in the table representing the correlation between being in a class where the ERWC teacher reported teaching all of the necessary modules and the students' achievement on the given outcome measure (Non-PT ICA or the Summative Assessment). School dummy variables, students' baseline scores, and student characteristics were included in the regression, but those coefficients are not reported here for brevity.

Source: Student characteristics and Summative Assessment scores are collected from the participating school districts. Non-PT ICA scores were collected from Cambium Assessment.

Grade 12 Power Analyses

The minimum detectable effect size (MDES) calculation for the grade 12 student outcomes were conducted in the same way as was done for the grade 11 student outcomes. Using a two-sided hypothesis test with 80% power and .05 alpha, a multiplier of 2.8 on the standard error would be used to calculate the MDES for the two outcome measures (Bloom, 1995). Neither of the impact estimates for grade 12 were significant, but calculating the MDES can still be useful to understand the power of the analysis to detect an impact. For the Non-PT ICA the MDES was calculated to be 0.168, well above the impact estimate (-.004). Similarly, the MDES of the analysis for the PT ICA was calculated to be 0.602, also well above the impact estimate (.339).

Grade 12 Sensitivity Analysis

Sensitivity analyses were conducted to assess whether the main impact results were sensitive to the type of analysis that was conducted. The sensitivity analyses used one-to-one matching without replacement and matching using complete cases (i.e., no imputation was conducted on the missing values). Both sensitivity analyses concluded that enrollment in the ERWC had no statistically significant impact on student achievement (see Table L.10).



Table L.10 Sensitivity Analysis

Regression Analysis	Number of Observations	Coefficient	Robust Standard Error	t-Statistic	p-Value
Non-PT ICA					
Main Impact Estimate	1,469	-0.004	.060	-0.06	.948
One-to-One Matching without replacement	676	-0.018	.066	-0.28	.782
Complete Case	1,006	-0.103	.064	-1.62	.106
PT ICA					
Main Impact Estimate	1,102	.339	.215	1.58	.114
One-to-One Matching without replacement	358	-0.238	.215	-1.11	.269
Complete Case	633	-0.172	.211	-0.81	.416

^{**} Denotes statistical significance at the 5 percent level; *** Denotes statistical significance at the 1 percent level.

Source: Student data collected from participating school districts; Interim Comprehensive Assessment data collected from Cambium Assessment.