Institute of Education Sciences

Reading Apprenticeship®

Intervention Brief | English Language Arts Topic Area

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Students need strong literacy skills to succeed in core academic subjects–English, mathematics, science, and social studies–and to be prepared for college and careers. *Reading Apprenticeship®* is a professional development program that aims to help teachers improve their students' literacy skills. The program also aims to improve student social-emotional learning outcomes such as belonging, social awareness, growth mindset, and self-efficacy. *Reading Apprenticeship®* trains teachers to model reading comprehension strategies and help students practice these strategies in their classrooms.

The What Works Clearinghouse (WWC) reviews existing research on educational interventions to identify evidence-based programs and practices. This WWC intervention report summarizes the available evidence on the effects of *Reading Apprenticeship®* on student achievement outcomes in middle and high school.

> **Goal:** *Reading Apprenticeship®* aims to help teachers improve their instructional practices so that they can better develop student literacy skills and improve social-emotional learning outcomes.
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> **Target population:** Teachers in middle schools, high schools, and community colleges across content areas–including English, mathematics, science, and social studies–can use *Reading Apprenticeship®*.

Did *Reading Apprenticeship®* improve student outcomes?

Five studies of *Reading Apprenticeship®* meet WWC standards. Findings from these five studies are summarized in Table 1. The table includes rows for each outcome domain–a group of related outcome measures–that was studied in the research.

Table 1 indicates whether the evidence satisfies the WWC's requirements for strong, moderate, or promising tiers of evidence. Based on one study that meets WWC standards, there is moderate evidence that *Reading Apprenticeship®* positively impacted student science achievement and grade point average.

The WWC effectiveness rating indicates whether *Reading Apprenticeship®* resulted in improved outcomes for students whose teachers participated in the program compared with students whose teachers did not. Taken together, findings from all five studies meeting WWC standards suggest that *Reading Apprenticeship®* had *potentially positive effects* on science achievement and grade point average and *uncertain effects* on achievement in life sciences, social studies, literacy, reading comprehension, vocabulary, and mathematics. Findings and conclusions could change as new research becomes available.

Studies also measured the effects of *Reading Apprenticeship®* on school attendance, credit accumulation, engagement, happiness, belonging, positive identity, growth mindset, and suspensions. However, these findings are not summarized in Table 1 because this report is primarily focused on the effects of *Reading Apprenticeship®* on certain academic outcomes as pre-specified in the Systematic Review Protocol for English Language Arts Interventions. Findings for these other outcomes, all of which showed *uncertain effects*, are reported on the WWC website. The effects of *Reading Apprenticeship®* on other student outcomes not discussed here are unknown.

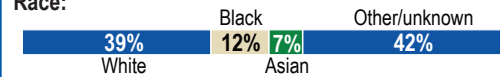**Table 1. Summary of findings on *Reading Apprenticeship*® from studies that meet WWC standards**

Outcome domain	Effectiveness rating	Sample size	Evidence tier	Summary
Science achievement	Potentially positive effects	1,151 students	TIER **2** MODERATE	One study provides strong evidence that *Reading Apprenticeship*® improved student science achievement. Because this assessment is based on only 1 study that meets WWC standards, the WWC effectiveness rating is potentially positive effects.
Academic achievement (grade point average)	Potentially positive effects	2,563 students	TIER **2** MODERATE	One study provides strong evidence that *Reading Apprenticeship*® improved student grade point average. Because this assessment is based on only 1 study that meets WWC standards, the WWC effectiveness rating is potentially positive effects.
Life sciences	Uncertain effects	1,172 students	NO TIER ASSIGNED	The research does not support claims that *Reading Apprenticeship*® improved life sciences achievement. This assessment is based on 1 study that meets WWC standards.
Social studies achievement	Uncertain effects	447 students	NO TIER ASSIGNED	The research does not support claims that *Reading Apprenticeship*® improved social studies achievement. This assessment is based on 1 study that meets WWC standards.
Literacy achievement	Uncertain effects	9,178 students	NO TIER ASSIGNED	The research does not support claims that *Reading Apprenticeship*® improved general literacy achievement. This assessment is based on 3 studies that meet WWC standards.
Reading comprehension	Uncertain effects	20,716 students	NO TIER ASSIGNED	The research does not support claims that *Reading Apprenticeship*® improved reading comprehension. This assessment is based on 5 studies that meet WWC standards.
Vocabulary	Uncertain effects	2,255 students	NO TIER ASSIGNED	The research does not support claims that *Reading Apprenticeship*® improved student vocabulary. This assessment is based on 1 study that meets WWC standards.
Mathematics achievement	Uncertain effects	7,819 students	NO TIER ASSIGNED	The research does not support claims that *Reading Apprenticeship*® improved mathematics achievement. This assessment is based on 2 studies that meet WWC standards.

FINDINGS FROM 5 STUDIES

22,176 students in California, Michigan, New York, Pennsylvania, Texas, and Wisconsin

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STUDENTS IN GRADES 7–9

Race:

| White 39% | Black 12% | Asian 7% | Other/unknown 42% |

Hispanic/Latino: 39%

Free & Reduced-Price Lunch: 52%

Special Education: 11%

Female: 47%

How was *Reading Apprenticeship®* implemented?

This section provides details of how districts and schools implemented *Reading Apprenticeship®* in the five studies that contribute to this intervention report. This information can help educators identify the requirements for implementing *Reading Apprenticeship®* and determine whether implementing this program would be feasible in their districts or schools.

Reading Apprenticeship® professional development is usually implemented along with a school-selected literacy curriculum. *Reading Apprenticeship®* began as a yearlong curriculum for struggling readers. The original program, called *Reading Apprenticeship Academic Literacy (RAAL)*, was implemented in the 1996–97 school year, before the introduction of the professional development program. The *Reading Apprenticeship®* professional development program, which includes a summer training series and coaching during the school year, was developed in 1999 and remains available today. Between 2010 and 2015, the developers designed three new program packages that emphasized different aspects of the program. *Reading Apprenticeship Improving Secondary Education (RAISE)* was designed to support a larger number of *Reading Apprenticeship®* teachers within schools by recruiting teacher leaders and providing other supports such as monthly school-based meetings for teachers. Another package, *Internet-*

Comparison condition: In the five studies that contribute to this intervention report, students in the comparison group were taught by teachers who did not participate in *Reading Apprenticeship®*. Comparison students received instruction in the same core subjects as students in the intervention group, except in one study (Somers et al., 2010), where comparison students participated in an elective course not related to English language arts. Teachers may have participated in other training or professional development programs offered by their schools or school districts.

based Reading Apprenticeship Improving Science Education (iRAISE), was developed for high school science teachers only and consists of online training. *Reading Apprenticeship Across the Disciplines (RAAD)* offers fewer professional development sessions by streamlining some content in the standard *Reading Apprenticeship®* professional development program.

The five studies summarized in this intervention report each implemented a different package:

- *RAAL* curriculum with professional development (Somers et al., 2010)
- *Reading Apprenticeship®* original professional development (Greenleaf et al., 2009)
- *RAISE* professional development (Fancsali et al., 2015)
- *iRAISE* professional development (Jaciw et al., 2016)
- *RAAD* professional development (Pyatigorsky et al., 2019)

Each package of *Reading Apprenticeship®* included virtual or in-person training, which was conducted on-site or off-site, as well as access to follow-up supports. In all packages, teachers implemented *Reading Apprenticeship®* instructional strategies with their students. The program was implemented over the course of 1 school year for each cohort of students, and in two studies (Fancsali et al., 2015, and Pyatigorsky et al., 2019), some students were exposed to the program for 2 years. Table 2 describes the components and implementation of *Reading Apprenticeship®* in more detail.

WWC standards assess the quality of the research, not the quality of the implementation. Studies that meet WWC standards vary in quality of implementation. However, a study must describe the relevant components of the program and how each was implemented with adequate detail to be included in an intervention report.

Table 2. Implementation of components of *Reading Apprenticeship®*

Component	Description of the component	How it was implemented
Professional development	Teachers and other school staff may participate in two professional development courses: the *Reading Apprenticeship® Essentials I* course, which introduces educators to *Reading Apprenticeship®* instructional strategies, and the *Reading Apprenticeship® Essentials II* course, which focuses on cognitive and knowledge-building routines. Teachers then may receive on-site coaching from professional coaches or trained staff within the school or district. Professional development for teachers and other school staff is available in person (both on-site and off-site) or online and is delivered in nine 2-hour online trainings, or in 3- to 10-day in-person trainings, depending on the type of training selected. Teacher leaders, coaches, and administrators can also receive on-site coaching from the developer and may take an online course called *Leading for Literacy Online* to learn strategies to help support and sustain *Reading Apprenticeship®* implementation.	In four of the five studies reviewed for this report, teachers, teacher leaders, and administrators received a 5-day introductory training in the summer before the start of the program. Training for coaches, who were hired by the developer or regional partners, was provided separately. In the fifth study (Pyatigorsky et al., 2019), which implemented the *RAAD* package, the training was delivered over a 3-day period. Professional development was delivered in person in four studies and online in one study. Follow-up training was provided in all five studies. In addition, monthly professional learning community meetings were held in two studies, monthly teacher leader meetings were held in one study, weekly calls or emails were sent to teachers in one study, and periodic interviews or calls were held with teachers in one study.
Instructional strategies	Teachers use *Reading Apprenticeship®* instructional strategies with the goal of helping students to build comprehension skills, overcome difficulties with reading, interact more deeply with text, gain interest in reading, and improve their confidence in reading. Every educator who receives *Reading Apprenticeship®* professional development is given a copy of the developer's e-book, *Reading for Understanding*, for reference. In *Reading Apprenticeship®*, the teacher (the "master reader") models comprehension strategies and helps students (the "reading apprentices") practice these strategies. Teachers mentor students in reasoning and problem-solving skills designed to help students handle more complex reading tasks. Through conversations between teachers and students, students are expected to become aware of specific reading processes and to understand the thought processes that guide their comprehension of the text.	All *Reading Apprenticeship®* packages that were studied implemented the instructional strategies.

Note: The descriptive information for this intervention comes from the program website, https://readingapprenticeship.org; the five studies that meet WWC standards; and from correspondence with the developer.

How much does *Reading Apprenticeship®* cost?

This section provides educators with an overview of the resources needed to implement *Reading Apprenticeship®*. Table 3 describes the major resources needed for implementation and approximate costs, based on information available as of August 2022.

Table 3. Resources needed to implement *Reading Apprenticeship®*

Resource	Description	Funding source
Personnel	The *Reading Apprenticeship® Essentials* series includes three courses: an introduction to *Reading Apprenticeship®*; advanced materials and additional practice; and training for becoming a coach, teacher leader, or supporting administrator. Each course can be purchased for $900 per participant for online instruction or $1,500 per participant for in-person instruction. All in-person training activities include additional travel and lodging costs. On-site or online small-group coaching for teachers is also available for up to 40 teachers in half-day sessions.	School districts or schools cover costs for training and professional development, although the developer may have grant funding available to support the cost. In the studies reviewed for this report, professional development costs were covered by grant funding or direct support by WestEd's Strategic Literacy Initiative.
Facilities	Professional development is delivered online or in school facilities.	School districts or schools provide the facilities, computers, and internet access.
Equipment and materials	A copy of the developer's e-book, *Reading for Understanding*, is provided with the *Reading Apprenticeship®* Essentials courses. If a school is adopting the optional Reading Apprenticeship Academic Literacy curriculum, the teacher materials bundle costs $495.95 per teacher and includes transparencies, DVDs, and binders for each of the three units in the curriculum. The student materials bundle costs $92.75 per student and includes student readers and interactive notebooks.	School districts or schools purchase *Reading Apprenticeship®* materials for their teachers and students.

For more information about the cost of *Reading Apprenticeship®*:

About *Reading Apprenticeship®*
    WestEd/Strategic Literacy Initiative
    730 Harrison Street
    San Francisco, CA 94107
    Email: readingapprenticeship@wested.org Web: https://readingapprenticeship.org/. Phone: (301) 997-1891

About the cost of the intervention
    Web: https://readingapprenticeship.org/services/

LEARN MORE

Read the full intervention report to learn more about *Reading Apprenticeship®*, how it was implemented in the studies that meet standards, and what the studies found. Visit the WWC website for summaries of evidence on other interventions and to learn more about the research the WWC has reviewed.

* In February 2023 the WWC modified this report to correct an error in the percentage of students eligible to receive free and reduced-price lunch. The percentage on page 2 was corrected from 49% to 52%. This revised report replaces the original January 2023 report.