

# Xtreme Reading

## Intervention Brief | Adolescent Literacy Topic Area

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WHAT WORKS CLEARINGHOUSE™

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Literacy skills are critical to students’ academic achievement and for setting them on a path to successful high school graduation and readiness for college and careers. *Xtreme Reading* is a supplemental literacy curriculum designed to improve the literacy skills of struggling students in grades 6 to 12. The curriculum is primarily designed to help students improve their vocabulary, decoding, fluency, and reading comprehension skills. To ensure a productive learning environment, students initially learn social skills associated with creating a supportive learning community, including how to participate in certain class activities (for example, whole-group discussion, small-group work, partner work, transitions). They also participate in a motivational program whereby they discuss their hopes and dreams for the future and set personal goals related to reading

and other life areas. The *Xtreme Reading* program includes teacher-led whole-group instruction, cooperative group work, paired practice, and independent practice.

This What Works Clearinghouse (WWC) intervention report, part of the WWC’s Adolescent Literacy topic area, explores the effects of *Xtreme Reading* on student literacy achievement and comprehension (including reading comprehension and vocabulary skills). The WWC identified four studies of *Xtreme Reading*, two of which meet WWC standards. The evidence presented in this report is from studies of the effects of *Xtreme Reading* on ninth-grade students—including 81% non-White and 19% White students—from largely urban and diverse school districts.

### What Happens When Students Participate in *Xtreme Reading*?

**The evidence indicates that implementing *Xtreme Reading* has no discernible effects on comprehension or general literacy achievement.**

Findings on *Xtreme Reading* from two studies that meet WWC standards are shown in Table 1. The table reports an effectiveness rating, an improvement index, and the number of studies and students that contributed to the findings. The effectiveness rating is based on the quality of the designs used in studies, whether the findings are favorable or unfavorable for the intervention, and the number of studies that tested the intervention. See Box 1 for more information on interpreting effectiveness ratings.

In order to help readers judge the practical importance of an intervention’s effect, the WWC translates findings across studies into an “improvement index” by averaging findings that meet WWC standards within the same outcome domain. The improvement index can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention. For example, an improvement index of +2 means that the expected percentile rank of the average comparison group student would increase by 2 points if the student received the *Xtreme Reading* program. A positive improvement index does not necessarily mean the estimated effect is statistically significant.

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

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

Outcome domain	Effectiveness rating	Study Findings	Evidence meeting WWC standards (version 4.0)	
		Improvement index (percentile points)	Number of studies	Number of students
Comprehension	No discernible effects	+2	1	2,329
General literacy achievement	No discernible effects	0	2	1,870

Note: The effects of *Xtreme Reading* are not known for other outcomes within the Adolescent Literacy topic area, including alphabetics, reading fluency, writing conventions, writing productivity, and writing quality.

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

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

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

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

## How is Xtreme Reading Implemented?

The following section provides details of how districts and schools can implement *Xtreme Reading*. This information can help educators identify the requirements for implementing *Xtreme Reading* and determine whether implementing this intervention would be feasible in their districts or schools. Information on *Xtreme Reading* presented in this section comes from the developer's website and studies that meet WWC standards (Kemple et al., 2008; Sprague et al., 2012).

- **Goal:** The main goal of *Xtreme Reading* is to help students improve their vocabulary decoding, fluency, and reading comprehension skills such that they can succeed in their general secondary education courses. The bulk of the program focuses on reading comprehension. In order to ensure that students are productive learners, they are also taught basic social skills for participating in class appropriately and they set personal goals for their learning in the school year.
- **Target population:** The program is designed for struggling readers in grades 6 to 12 whose reading skills are 2 or more years below grade level. Students must be reading at least at the fourth-grade level.
- **Method of delivery:** *Xtreme Reading* is a supplemental curriculum that is typically offered in addition to students' regular literacy instruction. In most schools, it replaces an elective class. The program is designed for a class of

**Comparison condition:** The two studies of *Xtreme Reading* that contribute to this intervention report included three distinct comparison groups. Two of these were business-as-usual comparison groups in which students did not receive supplemental literacy instruction. They participated in a regularly scheduled elective class, such as band or art, instead of the *Xtreme Reading* class. In the third comparison group, students received the *READ 180*® curriculum as supplemental literacy instruction instead of a regularly scheduled elective class.

12 to 15 students. The assigned teacher, ideally an English language arts teacher, reading teacher, special education teacher, social studies teacher, or other interested intervention teacher, explicitly teaches literacy strategies and social skills using a prescriptive instructional approach that includes step-by-step instructional materials and daily plans.

- **Frequency and duration of service:** The *Xtreme Reading* program is designed to be delivered daily in a 45-minute class period. It can be adapted to a 90-minute schedule.
- **Intervention components:** *Xtreme Reading* includes several key components and features including instruction in advanced literacy strategies and social skills. Key components and features are described in Table 2.

**Table 2. Components of Xtreme Reading**

Key component	Description
Instruction in literacy strategies	The <i>Xtreme Reading</i> program includes instruction in advanced decoding skills, fluency, vocabulary, and reading comprehension using a number of instructional strategies. The Word Identification Strategy, which focuses on decoding, encompasses a variety of approaches to decode multi-syllable words, especially words that students encounter in secondary textbooks. Fluency instruction initially takes place in coordination with the Word Identification strategy and continues through the year. The Word Mapping strategy, which is focused on vocabulary, is aimed at teaching students new ways to determine and remember the meaning of the words and word parts (morphemes). Four strategies—Self-Questioning, Paraphrasing, Inferencing, and Visual Imagery—focus on reading and listening comprehension. The Self-Questioning Strategy enables students to ask themselves questions while reading, make predictions, and talk about answers to their questions. The Paraphrasing Strategy enables students to find and state the main idea and details for each paragraph as they read. The Inference Strategy enables students to analyze questions associated with a passage. When a question requires them to make an inference about information that is not in the passage, they look for clues and create an answer based on those clues. The Visual Imagery Strategy enables students to create pictures in their minds of the people, setting, and events described in a reading passage.
Instruction in social skills	The <i>Xtreme Reading</i> program includes explicit instruction in social skills to create and maintain a positive learning community within the classroom. In a program component called Xpect to Achieve, the teacher explains expected behaviors in a variety of classroom activities (discussions, paired work, small-group work, independent work), and teaches two units (Talking Together and the SCORE Skills) to ensure students acquire the needed social skills for <i>Xtreme Reading</i> activities. Then, while working through the Possible Selves unit, students identify their hopes, expectations, and fears as well as create and work toward goals related to reading and other life areas.
Instructional procedures	Teachers are trained to implement highly structured methods to support the learning strategies. Control is incrementally relinquished to students as they progress through the following eight stages: description, modeling, verbal practice, guided practice, paired practice, independent practice, differentiated instruction, and integration and generalization. The teacher starts by describing and modeling a strategy, then moves to shared work with the students providing verbal explanations and guidance. The teacher then shifts more responsibility to students through activities involving paired practice between students and independent practice. The seventh stage, differentiated instruction, offers additional support to students who struggle with the strategy, while providing others with varied opportunities for practice. By the eighth stage, integration and generalization, students work independently to gain an understanding of the application of the strategy within and outside the <i>Xtreme Reading</i> classroom.
Curriculum materials	The <i>Xtreme Reading</i> curriculum kit includes (1) an instructor notebook for use in teaching the Xpect to Achieve component and each of the literacy strategies; (2) a set of multimedia materials for instructors, including materials to use for remote learning; (3) 15 student passages books for the decoding and comprehension strategies; and (4) 15 student workbooks. A typical lesson consists of a combination of the following activities: (1) a short warm-up; (2) a whole-class lesson, in which the teacher describes or models a strategy, the students and teacher practice a strategy together, or both; (3) student practice, where students practice independently or in pairs while the teacher walks around the room and provides feedback; (4) word activities, where students learn and practice vocabulary strategies; (5) guided reading, where the teacher and students read a novel together; and (6) a short wrap-up, which includes a review of the day's lesson and a preview of the next day's lesson.
Teacher training	The <i>Xtreme Reading</i> professional development model typically includes initial training for teachers, ongoing in-class mentoring by coaches, and workshops on specific routines. Five days of workshops are recommended either in the summer or spread across the school year. Schools often plan 3 workshop days in the summer and 2 days during the remainder of the school year. Teachers are trained to implement highly structured methods to support the learning strategies.  Teacher training differed slightly across the two studies included in this intervention report. In Kemple et al. (2008), teachers received 5 days of summer training, 2 days of booster training during the year, and three on-site coaching visits that lasted 2 days each. In Sprague et al. (2012), teachers received 3 days of summer training in the first study year, and 2 days in the second study year; teachers also attended 4 to 5 full days of additional workshops during the year.

### What Does the Xtreme Reading Program Cost?

This preliminary list of costs is not designed to be exhaustive; rather, it provides educators an overview of the

major resources needed to implement the *Xtreme Reading* program. The program costs described in Table 3 are based on the information available as of June 2020.

**Table 3. Cost ingredients for Xtreme Reading**

Cost ingredients	Description	Source of funding
Personnel	Typically, this is a supplemental program taught by existing teachers already employed in the school or district. Example types of teachers who have successfully taught the program are English language arts teachers, reading teachers, special education teachers, and intervention teachers. The <i>Xtreme Reading</i> professional development model includes training for teachers and ongoing in-class mentoring by coaches. Five days of workshops are recommended during the year. Workshop costs typically are about \$1,500 per day plus expenses for a certified professional developer.	Schools provide time for teachers to participate in the training and to deliver the intervention. School districts typically cover the costs of <i>Xtreme Reading</i> .

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<b>Facilities</b>	The intervention is typically implemented in the students' regular classrooms.	School districts or schools provide the classroom facilities.
<b>Equipment and materials</b>	A complete kit for using the <i>Xtreme Reading</i> program in one classroom, including one teacher and 15 students, costs \$2,200. The kit includes (1) an instructor notebook for use in teaching the Xpect to Achieve component and each of the literacy strategies; (2) a set of multimedia materials for instructors, including materials to use for remote learning; (3) 15 student passages books for the decoding and comprehension strategies; and (4) 15 student workbooks. If the course is being taught for more than one class period per day by the same teacher (which is recommended), schools will need 15 student workbooks for each class period, and this is an added cost. Additional student workbooks can be purchased for future years. Schools can purchase a digital PDF version of the workbook to use in a remote learning environment. The student workbooks are the only program materials that will need to be replaced every year.	School districts usually purchase <i>Xtreme Reading</i> materials. Funding typically comes from curriculum budget, including federal Title I accounts.

### For More Information:

#### About *Xtreme Reading*

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#### About the cost of the intervention

All cost data were obtained from the program developer.

#### About the studies that meet WWC standards

Kemple, J. J., Corrin, W., Nelson, E., Salinger, T., Herrmann, S., & Drummond, K. (2008). *The Enhanced Reading Opportunities Study: Early impact and implementation findings* (NCEE 2008-4015). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

Retrieved from <https://eric.ed.gov/?id=ED499778>

Sprague, K., Zaller, C., Kite, A., & Hussar, K. (2012). *Springfield-Chicopee School Districts Striving Readers (SR) Program final report years 1–5: Evaluation of implementation and impact*. Providence, RI: The Education Alliance at Brown University. Retrieved from <https://eric.ed.gov/?id=ED600926>

## In What Context Was *Xtreme Reading* Studied?

The following section provides information on the setting of the two studies of *Xtreme Reading* that meet WWC standards, and a description of the participants in the research. This information can help educators understand the context in which the studies of *Xtreme Reading* were conducted and determine whether the program might be suitable for their setting.

### WHERE THE STUDY WAS CONDUCTED

2 studies, 3,008 students in at least 39 high schools in 12 districts in Georgia, Maryland, Massachusetts, Nebraska, New York, South Carolina, Texas, Utah, and Virginia.

#### Race



#### Ethnicity



Gender: 51% Female 49% Male

English Learners: 4%

Free & Reduced-Price Lunch: 54%

#### Grades



### LEARN MORE



Read more about the *Xtreme Reading* intervention and the studies that are summarized here in the [Intervention Report](#).