WWC Intervention Report U.S. DEPARTMENT OF EDUCATION

What Works Clearinghouse



Beginning Reading July 2, 2007

Failure Free Reading

Program description¹

Failure Free Reading is a language development program designed to improve vocabulary, fluency, word recognition, and reading comprehension for Kindergarten through grade 12 students who score in the bottom 15% on standardized tests and who have not responded to conventional beginning reading instruction. The three key dimensions of the program

are repeated exposure to text, predictable sentence structures, and story concepts that require minimal prior knowledge. The program combines systematic, scripted teacher instruction, talking software, workbook exercises, and independent reading activities. The program is delivered through small group or individual instruction.

Research

One study of Failure Free Reading met the What Works Clearinghouse (WWC) evidence standards. This study included 93 students from third grade in Pennsylvania.²

The WWC considers the extent of evidence for Failure Free Reading to be small for alphabetics, fluency, and comprehension. No studies that met WWC evidence standards with or without reservations addressed general reading achievement.

Effectiveness

Failure Free Reading was found to have no discernible effects on alphabetics and fluency, and potentially positive effects on comprehension.

	Alphabetics	Fluency	Comprehension	General reading achievement
Rating of effectiveness	No discernible effects	No discernible effects	Potentially positive	na
Improvement index ³	Average: +1 percentile points Range: -3 to +7 percentile points	Average: +2 percentile points	Average: +10 percentile points Range: +7 to +14 percentile points	na
				no – not applicable

- 1. The descriptive information for this program was obtained from publicly available sources: the program's web site (http://www.failurefreeonline.com/ index_parents.php, downloaded April, 2007) and the research literature (Torgesen et al., 2006). The WWC requests developers to review the program description sections for accuracy from their perspective. Further verification of the accuracy of the descriptive information for this program is beyond the scope of this review.
- 2. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
- 3. These numbers show the average and range of student-level improvement indices for all findings in the study.

Additional program information¹

Developer and contact

Failure Free Reading is distributed by Failure Free Reading. Address: 140 Cabarrus Ave. W., Concord, NC 28025. Web: http://www.failurefreeonline.com/index_parents.php. Telephone: (800) 542-2170.

Scope of use

Failure Free Reading was founded in 1988 as JFL Enterprises, Inc. In 1996 it became Failure Free Reading and since then has been implemented in approximately 7,500 schools across the United States.

Teaching

Failure Free Reading uses a model of repetition, text control, and student performance feedback to scaffold fluency and comprehension skills. Students read material designed to be of interest at their grade/age level. Students learn to read words, sentences, passages, and Lexile-leveled stories through repeated presentations, listening, discussions, readings, and reviews. Teachers monitor student progress with criterion-referenced print and online assessments and reports. The program is delivered through small group or individual instruction. The

level of instruction is determined by the students' challenge or frustration level, based on the assumption that repetition is not boring for struggling readers. Failure Free Reading also includes the Joseph Readers' Talking Software that is "reading neutral," meaning that students do not have to know how to read in order to learn critical words and passages. In this software, every item on the screen can be read aloud to the students. Verbal Master Software & Print is another available software, which aims to promote spelling, vocabulary, reading, and composition skills.

Failure Free Reading provides product training and staff development. Training sessions address classroom management, education plans for students, parent involvement, teacher communications, and reporting. Follow-up visits and access to online technical and telephone support are included. Three-day intensive "train the trainer" sessions are available for district-level implementation.

Cost

Failure Free Reading costs from \$300 for a single online student subscription to \$37,500 for a full school implementation, based on multi-platform, networked software. Training costs range from \$750 to \$2,500, plus trainer expenses.

Research

Fifty-nine studies reviewed by the WWC investigated the effects of *Failure Free Reading*. One study (Torgesen et al., 2006) was a randomized controlled trial that met WWC evidence standards. The remaining 58 studies did not meet evidence screens.

Torgesen et al. (2006) examined the effects of *Failure Free Reading* on 93 third-grade students in eight school units⁴ in Pennsylvania. Students in the comparison group participated in the regular reading program at their schools.

Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or moderate to large (see the What Works Clearinghouse Extent of Evidence Categorization Scheme). The extent of evidence takes into account the number of studies and the total sample size across the studies that met WWC evidence standards with or without reservations.⁵

- 4. A school unit consists of several partnered schools so that the cluster included two third-grade and two fifth-grade instructional groups. Because of the age range defined by the Beginning Reading review, only data on the third-grade students were included in this review.
- 5. The Extent of Evidence Categorization was developed to tell readers how much evidence was used to determine the intervention rating, focusing on the number and size of studies. Additional factors associated with a related concept, external validity, such as the students' demographics and the types of settings in which studies took place, are not taken into account for the categorization.

Research (continued)

The WWC considers the extent of evidence for *Failure Free*Reading to be small for alphabetics, fluency, and comprehension.

No studies that met WWC evidence standards with or without reservations addressed general reading achievement.

Effectiveness

Findings

The WWC review of interventions for beginning reading addresses student outcomes in four domains: alphabetics, fluency, comprehension, and general reading achievement.⁶ Torgesen et al. (2006) addressed three domains: alphabetics, fluency, and comprehension.

Alphabetics. Torgesen et al. (2006) examined four phonics outcomes in the alphabetics domain (Woodcock Reading Mastery Test–Revised (WRMT–R): Word Identification and Word Attack subtests and the Test of Word Reading Efficiency (TOWRE): Phonetic Decoding Efficiency and Sight Word Efficiency subtests). The authors reported that Failure Free Reading did not have a statistically significant effect on any of the four outcomes. The average effect size across the three outcomes was neither statistically significant nor large enough to be considered substantively important according to the WWC criteria (that is, an effect size of least 0.25).

Fluency. Torgesen et al. (2006) examined one outcome in this domain (the Oral Reading Fluency test) and reported no

statistically significant effect for this outcome. The effect size not large enough to be considered substantively important.

Comprehension. Torgesen et al. (2006) examined two outcomes in this domain (WRMT-R: Passage Comprehension subtest and Group Reading Assessment and Diagnostic Evaluation (GRADE): Passage Comprehension subtest) and reported no statistically significant effects. The average effect size across the two outcomes was large enough to be considered substantively important.

Rating of effectiveness

The WWC rates the effects of an intervention in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings,⁷ the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).

The WWC found Failure
Free Reading to have no
discernible effects on
alphabetics and fluency,
and potentially positive
effects on comprehension

Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study and an average improvement index across studies (see Technical Details of WWC-Conducted Computations). The improvement index represents the difference between the percentile rank of the average student in the intervention condition versus the percentile rank of the average student in the comparison

condition. Unlike the rating of effectiveness, the improvement index is based entirely on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analyses. The improvement index can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group.

The average improvement index for alphabetics is +1 percentile points across all findings in the single study, with a range of -3 to +7 percentile points. The average improvement index

- 6. For definitions of the domains, see the Beginning Reading Protocol.
- 7. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within class-rooms or schools and for multiple comparisons. For an explanation, see the <u>WWC Tutorial on Mismatch</u>. See the <u>Technical Details of WWC-Conducted Computations</u> for the formulas the WWC used to calculate the statistical significance. In the case of *Failure Free Reading*, corrections for multiple comparisons were needed.

The WWC found Failure
Free Reading to have no
discernible effects on
alphabetics and fluency, and
potentially positive effects
on comprehension (continued)

for fluency is +2 percentile points for the single outcome. The average improvement index for comprehension is +10 percentile points across all findings in the single study, with a range of +7 to +14 percentile points.

Summary

The WWC reviewed 59 studies on Failure Free Reading. One study met the WWC evidence standards. Based on this one study, the WWC found no discernible effects on alphabetics and fluency and potentially positive effects on comprehension. The evidence presented in this report may change as new research emerges.

References

Met WWC evidence standards

Torgesen, J., Myers, D., Schirm, A., Stuart, E., Vartivarian, S., Mansfield, W., et al. (2006). *National assessment of Title I interim report. Volume II: Closing the reading gap: First year findings from a randomized trial of four reading interventions for striving readers.* Retrieved from Institute of Education Sciences, U.S. Department of Education Web site: http://www.ed.gov/rschstat/eval/disadv/title1interimreport/index.html

Did not meet WWC evidence screens

Algozzine, B., & Lockavitch, J. F. (1998). Effects of the Failure Free Reading program on students at-risk for reading failure. *Special Services in the Schools*, *13*(1/2), 95–103.8

Algozzine, B., Lockavitch, J. F., & Audette, R. (1997). Implementing Failure-Free Reading with students seriously at-risk for failure. *Australian Journal of Learning Disabilities*, 2(3), 14–17.8

Bergquist, C. C., Richardson, G. H., Bigbie, C. L., Castine, W. H., Hancock, W. B., Largent, W. B., et al. (2001). *Final report of the Failure Free Reading Bridges programs funded under Florida's 2000 Specific Appropriation 5A: Executive summary.* Tallahassee, FL: Evaluation Systems Design, Inc.⁸

Blount, L. J. (2003). Clay County School District comprehensive school reform grant project summary and evaluation report July 1, 1998–June 30, 2001. Green Cove Springs, FL: Clay County School District.⁸

Educational Enhancement Services. (2000). Greensboro Elementary School comprehensive school reform evaluation report.

Retrieved August 26, 2006, from http://www.failurefree.com/downloads/Greensboro_CSRD_Report.pdf

Additional sources:

Failure Free Reading. (n.d.). Research summary intensive intervention for upper elementary students. Retrieved from http://www.failurefree.com/downloads/FFR_Upper_Elem_Intervention.pdf (Study: Florida Comprehensive School Reform Demonstration (CSRD) Sites)

Failure Free Reading. (2003). Failure Free Reading's continuum of effectiveness: Research summary. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Greensboro Elementary, Gadsden County, FL)

England, G., Collins, S., & Algozzine, B. (n.d.). Effects of Failure Free Reading on culturally and linguistically diverse students with learning disabilities. *Multiple Voices*, *5*(1), 28–37.8

Failure Free Reading. (n.d.). *Chicago Public Schools SES tutoring evaluation*. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)⁸

Failure Free Reading. (n.d.). *Dramatic intensive intervention*results in Chicago. Retrieved from http://www.failurefree.com/downloads/Dulles_Elem_Chicago.pdf

- 8. Does not use a strong causal design: this study did not use a comparison group.
- 9. The sample is not appropriate to this review: the parameters for this WWC review specified that students should be in grades kindergarten through third grade; this study did not disaggregate students in the eligible range from those outside the range.

- Failure Free Reading. (n.d.). Failure Free Reading research findings: OhioReads 2000-01 school year results. Retrieved August 26, 2006, from http://www.failurefree.com/downloads/FFR OHReads Set 1.pdf (Study: Hamden Elementary)⁹
- Failure Free Reading. (n.d.). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from http://www.failurefree.com/downloads/FFR_OHReads_Set_1.pdf (Study: Secrest Elementary)¹⁰
- Failure Free Reading. (n.d.). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from http://www.failurefree.com/downloads/FFR OHReads Set 1.pdf (Study: Shumaker Elementary)⁹
- Failure Free Reading. (n.d.). *Independent research study Failure*Free Reading research case study. (Available from Failure

 Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)⁸
- Failure Free Reading. (n.d.). Program effectiveness has been shown through an experimental design that includes experimental and control groups created through random assignment or carefully matched comparison groups. Retrieved from http://www.failurefree.com/downloads/FFR_vs_Control.pdf (Study: Cowee Elementary, Macon County, NC)¹⁰
- Failure Free Reading. (n.d.). Program effectiveness has been shown through an experimental design that includes experimental and control groups created through random assignment or carefully matched comparison groups. Retrieved from http://www.failurefree.com/downloads/FFR_vs_Control.pdf (Study: Southwest Elementary)¹¹
- Failure Free Reading. (n.d.). Research findings concerning the impact of the Failure Free Reading program on at-risk and special education lowest literacy students. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Accelerated growth curve)⁸
- Failure Free Reading. (n.d.). Research findings concerning the impact of the Failure Free Reading Program on at-risk and

- special education lowest literacy students. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Learning curve of at-risk and special education students)⁸
- Failure Free Reading. (n.d.). Research findings concerning the impact of the Failure Free Reading program on at-risk and special education lowest literacy students. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Sustaining growth)⁸
- Failure Free Reading. (n.d.). Research findings concerning the impact of the Failure Free Reading program on at-risk and special education lowest literacy students. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Transfer to standardized measuring instruments)⁸
- Failure Free Reading. (n.d.). Research summary intensive intervention for upper elementary students. Retrieved from http://www.failurefree.com/downloads/FFR_Upper_Elem_Intervention.pdf (Study: Klein ISD)⁸

Additional source:

- Failure Free Reading. (2005). Failure Free Reading's continuum of effectiveness: Research summary. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Klein ISD)
- Failure Free Reading. (n.d.). Research summary intensive intervention for upper elementary students. Retrieved from http://www.failurefree.com/downloads/FFR_Upper_Elem_Intervention.pdf (Study: Russellville, AL—Fall 2002)¹⁰
- Failure Free Reading. (n.d.). Research summary intensive intervention for upper elementary students. Retrieved from http://www.failurefree.com/downloads/FFR_Upper_Elem_Intervention.pdf (Study: Washington, DC—Spring 2002)⁹

 Additional source:
 - Failure Free Reading. (2002). Case study: Washington, D.C. research results: River Terrace Elementary & Miner

^{10.} The sample is not appropriate to this review: the parameters for this WWC review specified that students should be in grades kindergarten through third grade during the time of the intervention: this study did not focus on the targeted grades.

^{11.} Complete data are not reported: the WWC could not evaluate the design because complete data were not reported.

- Elementary. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)
- Failure Free Reading. (1999). Failure Free Reading's Impact on North Carolina's end of grade assessment. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Cabarrus County—Coltrane-Webb Elementary, NC)⁸
- Failure Free Reading. (1999). Failure Free Reading's Impact on North Carolina's end of grade assessment. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Catawba County)⁸
- Failure Free Reading. (1999). Failure Free Reading's Impact on North Carolina's end of grade assessment. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Johnson County—Benson Elementary, NC)⁸
 Additional source:
 - Failure Free Reading. (1999). Benson Elementary's 3rd and 4th graders experience 2 straight years of dramatic reading growth. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)
- Failure Free Reading. (1999). Failure Free Reading's Impact on North Carolina's end of grade assessment. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Lincoln County)⁸
- Failure Free Reading. (1999). Failure Free Reading's Impact on North Carolina's end of grade assessment. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Rutherford County—Rutherfordton Elementary, NC)⁸
- Failure Free Reading. (1999). Four week summer school with Failure Free Reading produces greater growth than entire year. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)¹⁰
- Failure Free Reading. (1999). *Twelve days with Failure Free Reading produced dramatic results* (North Carolina Research Brief 99.102). Retrieved from http://www.failurefree.com/downloads/FFR Catawba.pdf¹⁰

Failure Free Reading. (2003). Case study: Fairland East Elementary's fourth grade reading blitz. Concord, NC: Author. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord. NC 28025)¹⁰

Additional sources:

- Failure Free Reading. (n.d.). Case study: Fairland East Elementary's after-school solution. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)
- Failure Free Reading. (2003). Failure Free Reading's continuum of effectiveness: Research summary. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Fairland East Elementary, Proctorville, OH)
- Failure Free Reading. (2003). Case study: Washington, DC summer reading blitz for special education. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)⁸
- Failure Free Reading. (2003). Coronado High School Students, El Paso, TX: Stanford Achievement Test growth results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Chester Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Fullerton Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Lowest literacy students during OhioReads)⁸ Additional source:
 - Failure Free Reading. (2003). OhioReads research evaluation (2000–2001 School Year) impact on lowest literacy students. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)

- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Lincoln Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Lyme Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from http://www.failurefree.com/downloads/FFR OHReads Set 1.pdf (Study: Midway Elementary)⁹
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from http://www.failurefree.com/downloads/FFR_OHReads_Set_1.pdf (Study: Miles Standish Elementary)⁹
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Mount Washington Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: North Elementary, Urbana City Schools)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Perry Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: SC Dennis Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Williamson Elementary)⁸

- Failure Free Reading. (2003). Failure Free Reading's continuum of effectiveness: Research summary. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Dickerson Elementary)⁸
- Failure Free Reading. (2003). Failure Free Reading's continuum of effectiveness: Research summary. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: West Clay Elementary, Clay County, MS)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: Intervention for Beginning Reading. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Greenwood, MS: Longitudinal study of at-risk 1st graders)⁸
- Failure Free Reading. (2003). Failure Free Reading research findings: Intervention for Beginning Reading. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025) (Study: Rowan County, NC: Reading readiness study of at-risk 1st graders)⁸
- Failure Free Reading. (2003). Washington DC—Reed elementary 2002/03 results. Retrieved from http://www.failurefree.com/downloads/FFR_Reed_Elem_2003.pdf
- Failure Free Reading. (2004). *Anne Arundel County, MD*.
 Retrieved from http://www.failurefree.com/downloads/
 Anne Arundel Summary.pdf⁸
- Failure Free Reading. (2004). Supplemental educational service provider (SSP): Bacon School, Millville, NJ. Retreived from http://www.failurefree.com/downloads/Bacon_Results_Summary.pdf
- Lockavitch, J. F., & Algozzine, B. (1998). Effects of intensive intervention on students at-risk for reading failure. *The Florida Reading Quarterly*, 35(2), 27–31.9
- Lockavitch, J. F., Morgan, L., & Algozzine, B. (1999). Accelerating the growth curve: Improving opportunities for children at risk for reading failure. *Proven Practice*, *1*(2), 60–67.8
- McElveen, L. K. (2000, June). *Case study: Helen Edwards Elementary, New Orleans, Louisiana*. (Available from Failure Free Reading, 140 W. Cabarrus Ave., Concord, NC 28025)⁸

Additional sources:

- Failure Free Reading. (n.d.). Case study: Helen Edwards
 Elementary, New Orleans, Louisiana. (Available from Failure
 Free Reading, 140 W. Cabarrus Ave., Concord, NC 28025)
- McElveen, L. K. (2000). Helen S. Edwards elementary school:
 Comprehensive School Reform Demonstration program
 (CSRD): Evaluation report for year one of the Failure Free
 Reading Program. (Available from Failure Free Reading, 140
 W. Cabarrus Ave., Concord, NC 28025)
- Northwest Regional Educational Laboratory. (2003). *Brightmoor America reads challenge: Detroit, Michigan*. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)⁸

- Rankhorn, B., England, G., Collins, S. M., Lockavitch, J. F., & Algozzine, B. (1998). Effects of the Failure Free Reading program on students with severe reading disabilities. *Journal* of *Learning Disabilities*, 31(3), 307–312.9
- Schroeder, C., & Henry, S. (2003). *The Copperas Cove I.S.D.*Failure Free Reading research project. (Available from Failure Free Reading, 140 Cabarrus Ave., W., Concord, NC 28025)⁸
- Slate, J. (n.d.). Failure Free Reading: A program evaluation.

 Valdosta, GA: Valdosta State University, Department of Educational Leadership.⁸
- Slate, J., Algozzine, B., & Lockavitch, J. F. (1998). Effects of intensive remedial reading instruction. *Journal of At-Risk Issues*, *5*(1), 30–35.8

For more information about specific studies and WWC calculations, please see the <u>WWC Failure Free Reading</u> <u>Technical Appendices</u>.