WWC Intervention Report U.S. DEPARTMENT OF EDUCATION

# **What Works Clearinghouse**



Beginning Reading

July 2, 2007

# **Failure Free Reading**

# **Program description**<sup>1</sup>

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 Clearing-house (WWC) evidence standards. This study included 93 students from third grade in Pennsylvania.<sup>2</sup>

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 <sup>3</sup>	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

na = not applicable

- The descriptive information for this program was obtained from publicly available sources: the program's web site (<a href="http://www.failurefreeonline.com/">http://www.failurefreeonline.com/</a> 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 information<sup>1</sup>

#### **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 units<sup>4</sup> 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.<sup>6</sup> 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,<sup>7</sup> 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 <a href="Technical">Technical</a> <a href="Details of WWC-Conducted Computations">Details of WWC-Conducted Computations</a>). 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.

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: <a href="http://www.ed.gov/rschstat/eval/disadv/title1interimreport/index.html">http://www.ed.gov/rschstat/eval/disadv/title1interimreport/index.html</a>

#### 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.<sup>8</sup>

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.<sup>8</sup>

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

Retrieved August 26, 2006, from <a href="http://www.failurefree.com/downloads/Greensboro CSRD Report.pdf">http://www.failurefree.com/downloads/Greensboro CSRD Report.pdf</a>

#### Additional sources:

Failure Free Reading. (n.d.). Research summary intensive intervention for upper elementary students. Retrieved from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> Upper Elem <a href="Intervention.pdf">Intervention.pdf</a> (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)<sup>8</sup>

Failure Free Reading. (n.d.). *Dramatic intensive intervention*results in Chicago. Retrieved from <a href="http://www.failurefree.com/downloads/Dulles Elem Chicago.pdf">http://www.failurefree.com/downloads/Dulles Elem Chicago.pdf</a>

- 8. Does not use a strong causal design: this study did not use a comparison group.
- . 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 <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> OHReads Set 1.pdf (Study: Hamden Elementary)<sup>9</sup>

Failure Free Reading. (n.d.). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from <a href="http://www.failurefree.com/downloads/FFR\_OHReads\_Set\_1.pdf">http://www.failurefree.com/downloads/FFR\_OHReads\_Set\_1.pdf</a> (Study: Secrest Elementary)<sup>10</sup>

Failure Free Reading. (n.d.). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> OHReads Set 1.pdf (Study: Shumaker Elementary)<sup>9</sup>

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)<sup>8</sup>

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 <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> vs Control.pdf

(Study: Cowee Elementary, Macon County, NC)<sup>10</sup>

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 <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> vs Control.pdf (Study: Southwest Elementary)<sup>11</sup>

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)<sup>8</sup>

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)<sup>8</sup>

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)<sup>8</sup>

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)<sup>8</sup>

Failure Free Reading. (n.d.). Research summary intensive intervention for upper elementary students. Retrieved from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> Upper Elem Intervention.pdf (Study: Klein ISD)<sup>8</sup>

#### 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 <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> Upper Elem Intervention.pdf (Study: Russellville, AL—Fall 2002)<sup>10</sup>

Failure Free Reading. (n.d.). Research summary intensive intervention for upper elementary students. Retrieved from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> Upper Elem Intervention.pdf (Study: Washington, DC—Spring 2002)<sup>9</sup>

#### Additional source:

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

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<sup>10.</sup> 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.

<sup>11.</sup> 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
  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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>10</sup>
- Failure Free Reading. (1999). Twelve days with Failure Free Reading produced dramatic results (North Carolina Research Brief 99.102). Retrieved from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> Catawba.pdf<sup>10</sup>

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)<sup>10</sup>

#### 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup> 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)<sup>8</sup>
- 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)<sup>8</sup>
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> OHReads Set 1.pdf (Study: Midway Elementary)<sup>9</sup>
- Failure Free Reading. (2003). Failure Free Reading research findings: OhioReads 2000–01 school year results. Retrieved August 26, 2006, from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> OHReads Set 1.pdf (Study: Miles Standish Elementary)<sup>9</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>

- 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
- 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)<sup>8</sup>
- Failure Free Reading. (2003). Washington DC—Reed elementary 2002/03 results. Retrieved from <a href="http://www.failurefree.com/downloads/FFR">http://www.failurefree.com/downloads/FFR</a> Reed Elem 2003.pdf<sup>8</sup>
- Failure Free Reading. (2004). Anne Arundel County, MD.
  Retrieved from <a href="http://www.failurefree.com/downloads/">http://www.failurefree.com/downloads/</a>
  Anne Arundel Summary.pdf<sup>8</sup>
- Failure Free Reading. (2004). Supplemental educational service provider (SSP): Bacon School, Millville, NJ. Retreived from <a href="http://www.failurefree.com/downloads/Bacon Results-Summary.pdf">http://www.failurefree.com/downloads/Bacon Results-Summary.pdf</a>8
- 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)<sup>8</sup>

#### 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)<sup>8</sup>

- 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)<sup>8</sup>
- Slate, J. (n.d.). Failure Free Reading: A program evaluation.

  Valdosta, GA: Valdosta State University, Department of Educational Leadership.<sup>8</sup>
- 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>.

# **Appendix**

#### **Appendix A1** Study characteristics: Torgesen et al., 2006 (randomized controlled trial)

Characteristic	<b>Description</b>
Study citation	Torgesen, J., Myers, D., Schirm, A., Stuart, E., Vartivarian, S., Mansfield, W., et al. (2006). <i>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</i> . Retrieved from Institute of Education Sciences, U.S. Department of Education Web site: <a href="http://www.ed.gov/rschstat/eval/disadv/title1interimreport/index.html">http://www.ed.gov/rschstat/eval/disadv/title1interimreport/index.html</a>
Participants	The study design was based on random assignment of 37 school units <sup>1</sup> to one of four interventions: <i>Corrective Reading, Kaplan SpellRead, Failure Free Reading,</i> or <i>Wilson Reading.</i> Within each school, students were randomly assigned to the intervention or to the comparison condition. This report focuses on eight school units assigned to <i>Failure Free Reading.</i> <sup>2</sup> At the time of analysis, the sample included 93 third-grade students (55 in intervention and 38 in comparison groups). The number of students at baseline was not reported. <sup>3</sup> Students were eligible for participation in the study if they were identified as struggling readers by their teachers and if they scored at or below the 30th percentile on a word-level reading test and at or above the 5th percentile on a vocabulary test. The intervention group had 24% African-American students and the comparison group had 19%. The remaining students were Caucasian. Forty-five percent of the intervention group and 49% of the comparison group students were eligible for free/reduced lunch.
Setting	Eight school units in Pennsylvania.
Intervention	Failure Free Reading was implemented by 10 teachers. According to the study, almost all students in the intervention group received some of the treatment and a very large percentage received 80 or more hours of instruction. The intervention was administered in three ways: large-group reading instruction was delivered by a general education teacher most of the week, pull-out instruction in groups of three students with mixed levels of basic reading skills occurred for about six hours a week, and one-on-one instruction was delivered by a reading specialist for less than one hour a week. Implementation fidelity was analyzed by reading program trainers who observed the teachers and coached them over several months, project coordinators who observed a sample of instructional sessions, and ratings based on a sample of videotaped sessions. Implementation was rated as acceptable.
Comparison	The comparison group students received their regular reading instruction, which included typical classroom instruction and, in many cases, other services (such as another pull-out program). The comparison group students had fewer small-group instructional hours than the intervention group students, but more one-on-one instructional hours.
Primary outcomes and measurement	The primary outcome measures in the alphabetics domain were the Word Identification and Word Attack subtests of the Woodcock Reading Mastery Tests—Revised (WRMT—R) and the Phonemic Decoding Efficiency and the Sight Words Efficiency subtests of the Test of Word Reading Efficiency (TOWRE). The primary measure in the fluency domain was the Oral Reading Fluency test. The primary measures in the comprehension domain were the Passage Comprehension subtest of WRMT—R and the Passage Comprehension subtest of Group Reading Assessment and Diagnostic Evaluation (GRADE). (See Appendix A2.1—2.3 for more detailed descriptions of outcome measures.)
Teacher training	Professional development included training and coaching by reading program staff, independent study of program materials, and telephone conferences. On average, intervention group teachers participated in 70.8 professional development hours across all phases of the study (initial training phase, practice phase, and implementation phase).

- 1. A school unit consists of several partnered schools so that the cluster included two third-grade and two fifth-grade instructional groups.
- 2. Findings on Corrective Reading, Kaplan SpellRead, and Wilson Reading are included in other WWC Beginning Reading reports.
- 3. The study reported that two students in the intervention group and three students in the comparison group were lost to analysis. However, it is not clear if those students were in third grade or were part of an additional sample of fifth-grade students that was also examined in this study. The fifth-grade sample included in this study is not reviewed in this report because it is outside the scope of the review. For sample relevancy criteria, please see the Beginning Reading Protocol.

# **Appendix A2.1 Outcome measures in the alphabetics domain**

Outcome measure	<b>Description</b>
Test of Word Reading Efficiency (TOWRE): Phonetic Decoding Efficiency subtest	The TOWRE is a standardized, nationally normed measure. The phonetic decoding efficiency subtest measures the number of pronounceable printed nonwords that can be accurately decoded within 45 seconds (as cited in Torgesen et al., 2006).
TOWRE: Sight Word Efficiency subtest	The TOWRE is a standardized, nationally normed measure. The sight word efficiency subtest assesses the number of real printed words that can be accurately identified within 45 seconds (as cited in Torgesen et al., 2006).
Woodcock Reading Mastery Test-Revised (WRMT-R): Word Identification subtest	The word identification subtest is a test of decoding skills. The standardized test requires the child to read aloud isolated real words that range in frequency and difficulty (as cited in Torgesen et al., 2006).
WRMT-R: Word Attack subtest	This standardized test measures phonemic decoding skills by asking students to read pseudowords. Students are aware that the words are not real (as cited in Torgesen et al., 2006).

# Appendix A2.2 Outcome measure in the fluency domain

Outcome measure	Description
Edformation Oral Fluency Assessment	This test measures the number of words correct per minute (WCPM) that students read using three brief grade-level passages (AIMSweb, as cited in Torgesen et al., 2006). These passages include both fiction and nonfiction text. The norms for this test are updated by Edformation each school year.

# **Appendix A2.3 Outcome measures in the comprehension domain**

Outcome measure	<b>Description</b>
Group Reading Assessment and Diagnostic Evaluation (GRADE): Passage Comprehension subtest	The GRADE is an untimed norm-referenced standardized test. The passage comprehension subtest includes a passage of text and corresponding multiple-choice comprehension questions (as cited in Torgesen et al., 2006).
WRMT-R: Passage Comprehension subtest	In this standardized test, comprehension is measured by having students fill in missing words in a short paragraph (as cited in Torgesen et al., 2006).

# Appendix A3.1 Summary of study findings included in the rating for the alphabetics domain<sup>1</sup>

			Authors' finding	s from the study	-			
			Mean outcome (standard deviation²) WWC calculations		lculations			
Outcome measure	Study sample	Sample size (school units/ students)	Failure Free Reading group	Comparison group	Mean difference <sup>3</sup> ( <i>Failure Free</i> <i>Reading</i> – comparison)	Effect size <sup>4</sup>	Statistical significance <sup>5</sup> (at $\alpha = 0.05$ )	Improvement index <sup>6</sup>
		To	rgesen et al., 2006	(randomized contr	olled trial) <sup>7</sup>			
WRMT-R: Word Identification subtest	Grade 3	8/93	88.01 (15.00)	86.66 (15.00)	1.35	0.09	ns	+4
WRMT-R: Word Attack subtest	Grade 3	8/93	89.36 (15.00)	89.89 (15.00)	-0.53	-0.04	ns	<b>–</b> 1
TOWRE: Phonetic Decoding Efficiency subtest	Grade 3	8/93	87.05 (15.00)	88.36 (15.00)	-1.31	-0.09	ns	-3
TOWRE: Sight Word Efficiency subtest	Grade 3	8/93	90.01 (15.00)	87.39 (15.00)	2.62	0.17	ns	+7
Domain average <sup>8</sup> for alphabetics						0.04	ns	+1

#### ns = not statistically significant

- 1. This appendix reports findings considered for the effectiveness rating and the average improvement indices. The study also included subgroup analyses by initial skill level (WRMT–R: Word Attack subtest and Peabody Picture Vocabulary Test (PPVT)) and socio-economic status. No differences were found between subgroups of students for outcomes in the alphabetics domain.
- 2. The standard deviation across all students in each group shows how dispersed the participants' outcomes are: a smaller standard deviation on a given measure would indicate that participants had more similar outcomes. The standard deviations in Torgesen et al. (2006) were population standard deviations.
- 3. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. The intervention group mean is the comparison group mean plus the mean difference.
- 4. For an explanation of the effect size calculation, see Technical Details of WWC-Conducted Computations.
- 5. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between the groups.
- 6. 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. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.
- 8. This row provides the study average, which, in this instance, is also the domain average. The WWC-computed domain average effect size is a simple average rounded to two decimal places. The domain improvement index is calculated from the average effect size.

# Appendix A3.2 Summary of study findings included in the rating for the fluency domain<sup>1</sup>

			Mean o	s from the study utcome deviation²)	-	WWC ca	lculations	
Outcome measure	Study sample	Sample size (school units/ students <sup>3</sup> )	Failure Free Reading group	Comparison group	Mean difference <sup>4</sup> ( <i>Failure Free</i> <i>Reading</i> – comparison)	Effect size <sup>5</sup>	Statistical significance <sup>6</sup> (at $\alpha = 0.05$ )	Improvement index <sup>7</sup>
		To	orgesen et al., 2006	(randomized contr	olled trial) <sup>8</sup>			
Oral Reading Fluency	Grade 3	8/93	56.89 (39.20)	55.03 (39.20)	1.86	0.05	ns	+2
Domain average <sup>9</sup> for fluency						0.05	ns	+2

#### ns = not statistically significant

- 1. This appendix reports findings considered for the effectiveness rating and the average improvement indices. The study also included subgroup analyses by initial skill level (WRMT–R: Word Attack subtest and Peabody Picture Vocabulary Test (PPVT)) and socio-economic status. No differences were found between subgroups of students for outcomes in the fluency domain.
- 2. The standard deviation across all students in each group shows how dispersed the participants' outcomes are: a smaller standard deviation on a given measure would indicate that participants had more similar outcomes. The standard deviations in Torgesen et al. (2006) are the population standard deviations for these standardized outcomes.
- 3. The sample size for the analysis was not reported in Torgesen et al. (2006). The sample size reported is the total number of third-grade students in the intervention and control conditions at baseline, which may differ from the actual number of students used in the various analysis in the report.
- 4. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. The intervention group mean is the comparison group mean plus the mean difference.
- 5. For an explanation of the effect size calculation, see Technical Details of WWC-Conducted Computations.
- 6. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between the groups.
- 7. 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. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.
- 9. This row provides the domain average, which, in this instance, is also the study finding for the single outcome. The WWC-computed domain average effect size is a simple average rounded to two decimal places. The domain improvement index is calculated from the average effect size.

# Appendix A3.3 Summary of study findings included in the rating for the comprehension domain<sup>1</sup>

			Mean o	s from the study utcome deviation <sup>2</sup> )	<u></u>		lculations		
Outcome measure	Study sample	Sample size (school units/ students <sup>3</sup> )	Failure Free Reading group	Comparison group	Mean difference <sup>4</sup> ( <i>Failure Free</i> <i>Reading</i> – comparison)	Effect size <sup>5</sup>	Statistical significance <sup>6</sup> (at $\alpha = 0.05$ )	Improvement index <sup>7</sup>	
		To	orgesen et al., 2006	(randomized contr	olled trial) <sup>8</sup>				
GRADE: Passage Comprehension subtest	Grade 3	8/93	83.71 (15.00)	78.43 (15.00)	5.28	0.35	ns	+14	
WRMT–R: Passage Comprehension subtest	Grade 3	8/93	90.38 (15.00)	87.65 (15.00)	2.73	0.18	ns	+7	
Domain average <sup>9</sup> for comprel	hension					0.26	ns	+10	

#### ns = not statistically significant

- 1. This appendix reports findings considered for the effectiveness rating and the average improvement indices. The study also included subgroup analyses by initial skill level (WRMT–R: Word Attack subtest and Peabody Picture Vocabulary Test (PPVT)) and socio-economic status. No differences were found between subgroups of students for outcomes in the comprehension domain.
- 2. The standard deviation across all students in each group shows how dispersed the participants' outcomes are: a smaller standard deviation on a given measure would indicate that participants had more similar outcomes.
- 3. The sample size for the analysis was not reported in Torgesen et al. (2006). The sample size reported is the total number of third-grade students in the intervention and control conditions at baseline, which may differ from the actual number of students used in the various analysis in the report.
- 4. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. The intervention group mean is the comparison group mean plus the mean difference.
- 5. For an explanation of the effect size calculation, see Technical Details of WWC-Conducted Computations.
- 6. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between the groups.
- 7. 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. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.
- 9. This row provides the domain average, which, in this instance, is also the study average. The WWC-computed domain average effect size is a simple average rounded to two decimal places. The domain improvement index is calculated from the average effect size.

# **Appendix A4.1** Failure Free Reading rating for the alphabetics domain

The WWC rates an intervention's effects in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. For the outcome domain of alphabetics, the WWC rated *Failure Free Reading* as having no discernible effects. It did not meet the criteria for other ratings (positive effects, potentially positive effects, mixed effects, potentially negative effects, and negative effects) because the single study that met WWC standards did not show statistically significant or substantively important effects.

## **Rating received**

No discernible effects: No affirmative evidence of effects.

Criterion 1: None of the studies shows a statistically significant or substantively important effect, either positive or negative.

Met. No studies showed statistically significant or substantively important positive or negative effects.

#### Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

• Criterion 1: Two or more studies showing statistically significant positive effects, at least one of which met WWC evidence standards for a strong design.

Not met. No studies showed statistically significant positive effects.

#### **AND**

Criterion 2: No studies showing statistically significant or substantively important negative effects.

Met. No studies showed statistically significant or substantively important negative effects.

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

• Criterion 1: At least one study showing a statistically significant or substantively important positive effect.

Not met. No studies showed statistically significant or substantively important positive effects.

#### **AND**

• Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

Not met. The single study that met WWC standards showed indeterminate effects.

Mixed effects: Evidence of inconsistent effects as demonstrated through either of the following criteria.

• Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect, and at least one study showing a statistically significant or substantively important *negative* effect, but no more such studies than the number showing a statistically significant or substantively important *positive* effect.

Not met. No studies showed statistically significant or substantively important effects, either positive or negative.

#### OR

• Criterion 2: At least one study showing a statistically significant or substantively important effect, and more studies showing an *indeterminate* effect than showing a statistically significant or substantively important effect.

Not met. No studies showed statistically significant or substantively important effects, either positive or negative.

(continued)

# **Appendix A4.1** Failure Free Reading rating for the alphabetics domain (continued)

Potentially negative effects: Evidence of a negative effect with no overriding contrary evidence.

Criterion 1: At least one study showing a statistically significant or substantively important negative effect.

Not met. No studies showed statistically significant or substantively important negative effects.

#### **AND**

• Criterion 2: No studies showing a statistically significant or substantively important *positive* effect, or more studies showing statistically significant or substantively important *positive* effects.

Met. No studies showed statistically significant or substantively important positive effects. In addition, no studies showed a statistically significant or substantively important negative effect.

Negative effects: Strong evidence of a negative effect with no overriding contrary evidence.

• Criterion 1: Two or more studies showing statistically significant *negative* effects, at least one of which met WWC evidence standards for a strong design.

Not met. No studies showed statistically significant negative effects.

#### **AND**

• Criterion 2: No studies showing statistically significant or substantively important positive effects.

Met. No studies showed statistically significant or substantively important positive effects.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. See the <a href="https://www.lntervention.negative">www.lntervention.negative</a> effects. See the <a href="https://www.lntervention.negative</a> effects effects effects. See the <a href="https://www.lntervention.negative</a> effects effects effects. See the <a href="https://wwww.lntervention.negative</a> effects effects effects effects effe

# Appendix A4.2 Failure Free Reading rating for the fluency domain

The WWC rates an intervention's effects in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. For the outcome domain of fluency, the WWC rated *Failure Free Reading* as having no discernible effects. It did not meet the criteria for other ratings (positive effects, potentially positive effects, mixed effects, potentially negative effects, and negative effects) because the single study that met WWC standards did not show statistically significant or substantively important effects.

## **Rating received**

No discernible effects: No affirmative evidence of effects.

Criterion 1: None of the studies shows a statistically significant or substantively important effect, either positive or negative.

Met. No studies showed statistically significant or substantively important positive or negative effects.

#### **Other ratings considered**

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

• Criterion 1: Two or more studies showing statistically significant positive effects, at least one of which met WWC evidence standards for a strong design.

Not met. No studies showed statistically significant positive effects.

#### **AND**

Criterion 2: No studies showing statistically significant or substantively important negative effects.

Met. No studies showed statistically significant or substantively important negative effects.

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

• Criterion 1: At least one study showing a statistically significant or substantively important positive effect.

Not met. No studies showed statistically significant or substantively important positive effects.

#### **AND**

• Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

Not met. The single study that met WWC standards showed indeterminate effects.

Mixed effects: Evidence of inconsistent effects as demonstrated through either of the following criteria.

• Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect, and at least one study showing a statistically significant or substantively important *negative* effect, but no more such studies than the number showing a statistically significant or substantively important *positive* effect.

Not met. No studies showed statistically significant or substantively important effects, either positive or negative.

#### OR

• Criterion 2: At least one study showing a statistically significant or substantively important effect, and more studies showing an *indeterminate* effect than showing a statistically significant or substantively important effect.

Not met. No studies showed statistically significant or substantively important effects, either positive or negative.

(continued)

**July 2, 2007** 

# **Appendix A4.2** Failure Free Reading rating for the fluency domain (continued)

Potentially negative effects: Evidence of a negative effect with no overriding contrary evidence.

Criterion 1: At least one study showing a statistically significant or substantively important negative effect.

Not met. No studies showed statistically significant or substantively important negative effects.

#### **AND**

• Criterion 2: No studies showing a statistically significant or substantively important *positive* effect, or more studies showing statistically significant or substantively important *positive* effects.

Met. No studies showed statistically significant or substantively important positive effects. In addition, no studies showed a statistically significant or substantively important negative effect.

Negative effects: Strong evidence of a negative effect with no overriding contrary evidence.

• Criterion 1: Two or more studies showing statistically significant *negative* effects, at least one of which met WWC evidence standards for a strong design.

Not met. No studies showed statistically significant negative effects.

#### **AND**

• Criterion 2: No studies showing statistically significant or substantively important positive effects.

Met. No studies showed statistically significant or substantively important positive effects.

# Appendix A4.3 Failure Free Reading rating for the comprehension domain

The WWC rates an intervention's effects in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. For the outcome domain of comprehension, the WWC rated *Failure Free Reading* as having potentially positive effects. It did not meet the criteria for positive effects because it had only one study, and that study did not show statistically significant positive effects. The remaining ratings (mixed effects, no discernible effects, potentially negative effects, and negative effects) were not considered because *Failure Free Reading* was assigned a higher applicable rating.

#### **Rating received**

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

Criterion 1: At least one study showing a statistically significant or substantively important positive effect.

**Met.** One study showed a substantively important positive effect.

#### AND

• Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

Met. No studies showed a statistically significant or substantively important negative effect. The single study that met the WWC standards showed a substantively important positive effect.

#### **Other ratings considered**

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

Criterion 1: Two or more studies showing statistically significant positive effects, at least one of which met WWC evidence standards for a strong design.
 Not met. No studies showed statistically significant positive effects.

#### AND

• Criterion 2: No studies showing statistically significant or substantively important negative effects.

Met. No studies showed statistically significant or substantively important negative effects.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. See the <a href="https://www.wwc.ntervention.negative-negativ-negative-negative-negat

# Appendix A5 Extent of evidence by domain

	Sample size							
Outcome domain	Number of studies	School units	Students	Extent of evidence <sup>1</sup>				
Alphabetics	1	8	93	Small				
Fluency	1	8	93	Small				
Comprehension	1	8	93	Small				
General reading achievement	0	0	0	na				

## na = not applicable/not studied

<sup>1.</sup> A rating of "moderate to large" requires at least two studies and two schools across studies in one domain, and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the rating is "small."