



## REL Southwest Ask-A-REL Response

Literacy

October 2017

### Question:

Provide research on strategies, programs, and interventions for striving/struggling readers.

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### Background:

The U.S. Department of Education awarded \$368,240,982 in Striving Readers Comprehensive Literacy (SRCL) grants to 11 states. The grants ranged from \$20,000,000 to \$61,579,800. SRCL grants are designed to improve literacy in children from birth through high school. Three states in the REL Southwest region—Louisiana (\$55.5M), New Mexico (\$20M) and Oklahoma (\$21.3M)—were grant recipients.<sup>1</sup> For the state of Oklahoma, this is one of the largest grants in Oklahoma State Department of Education history.<sup>2</sup> According to the U.S. Department of Education, Louisiana is the only state to receive the SRLC grant three consecutive times. Louisiana Superintendent of Education John White says only 36 percent of Louisiana's children read and write on grade level by grade 4.<sup>3</sup>

### Response:

Following an established REL Southwest research protocol, we conducted a search for research reports as well as descriptive study articles on striving/struggling readers. We focused on identifying resources that specifically addressed strategies, programs, and interventions that focus on meeting the needs of striving/struggling readers. The sources included ERIC and other federally funded databases and organizations, research institutions, academic research databases, and general Internet search engines (For details, please see the methods section at the end of this memo.)

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<sup>1</sup> U.S. Department of Education: Striving Readers Comprehensive Literacy (SRCL) Grant Program—<https://www2.ed.gov/programs/strivingreaders-literacy/awards.html>.

<sup>2</sup> Oklahoma State Department of Education (Posted 10/06/2017). OSDE receives \$21 million education grant to improve reading literacy. <http://sde.ok.gov/sde/newsblog/2017-10-06/osde-receives-21-million-education-grant-improve-reading-literacy>.

<sup>3</sup> Louisiana Department of Education: Louisiana Believes (Posted 10/03/2017). Louisiana awarded \$55.5 million to improve reading, writing skills of struggling students. [http://www.louisianabelieves.com/newsroom/news-releases/2017/10/03/louisiana-awarded-\\$55.5-million-to-improve-reading-writing-skills-of-struggling-students](http://www.louisianabelieves.com/newsroom/news-releases/2017/10/03/louisiana-awarded-$55.5-million-to-improve-reading-writing-skills-of-struggling-students).

## ***Research References***

Barth, A. E., Vaughn, S., Capin, P., Cho, E., Stillman-Spisak, S., Martinez, L., & Kincaid, H. (2016). Effects of a text-processing comprehension intervention on struggling middle school readers. *Topics in Language Disorders, 36*(4), 368-389.  
<https://eric.ed.gov/?id=EJ1118928>

*From the ERIC abstract:* “Purpose: We examined the effects of a text-processing reading comprehension intervention emphasizing listening comprehension and expressive language practices with middle school students with reading difficulties. Method: A total of 134 struggling readers in grades 6-8 were randomly assigned to treatment (n = 83) and control conditions (n = 51) using a 2:1 ratio (two students randomized to treatment for every one student randomized to control). Students in the treatment condition received 40 min of daily instruction in small groups of four to six students for approximately 17 hr. Results: One-way analysis of covariance models on outcome measures with the respective pretest scores as a covariate revealed significant gains on proximal measures of vocabulary and key word and main idea formulation. No significant differences were found on standardized measures of listening and reading comprehension. Discussion: Results provide preliminary support for integrating listening comprehension and expressive language practices within a text-processing reading comprehension intervention framework for middle-grade struggling readers.”

Boulay, B., Goodson, B., Frye, M., Blocklin, M., & Price, C. (2015). Summary of research generated by striving readers on the effectiveness of interventions for struggling adolescent readers (NCEE 2016-4001). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. <https://eric.ed.gov/?id=ED560732>

*From the ERIC abstract:* “The Striving Readers program aimed to raise the literacy levels of middle and high school students reading below grade level and to build a strong research base on effective adolescent literacy interventions. This report summarizes the results of a systematic review of evaluations of the ten different interventions funded by the Striving Readers grant program in 2006 and 2009. Twelve of the 17 evaluations met What Works Clearinghouse (WWC) evidence standards without reservations, three evaluations met WWC evidence standards with reservations, and two evaluations did not meet WWC evidence standards. Based on findings from the evaluations found to meet WWC evidence standards with or without reservations, four of the ten interventions funded by Striving Readers had positive, potentially positive, or mixed effects on reading achievement. Three of these four interventions had not previously been reviewed by the WWC. The following are appended: (1) Review process; (2) References; and (3) Detailed findings from the Striving Readers-funded studies meeting What Works Clearinghouse™ evidence standards.”

Feldman, J., Feighan, K., Kirtcheva, E., & Heereen, E. (2012). Aiming high: Exploring the influence of implementation fidelity and cognitive demand levels on struggling readers' literacy outcomes. *Journal of Classroom Interaction, 47*(1), 4-13.  
<https://eric.ed.gov/?id=EJ974651>

*From the ERIC abstract:* “Researchers studied components of a two-year school-wide Striving Readers intervention aimed at bolstering middle school teachers' use of literacy strategies to raise students' reading achievement. Although students of intervention teachers had significantly higher Iowa Test of Basic Skills (ITBS) scores than students of non-participating teachers, no evidence was found that suggested relationships existed among teachers' fidelity of implementation (FOI), observed cognitive demand level of classroom lessons, and students' performance on the ITBS. Higher cognitive demand and FOI ratings were associated with use of more literacy strategies overall, and comprehension strategies in particular. Study implications, limitations and areas for future research are discussed. (Contains 4 tables.)”

Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). Foundational skills to support reading for understanding in kindergarten through 3rd grade. educator's practice guide. (NCEE 2016-4008). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.  
<https://eric.ed.gov/?id=ED566956>

*From the ERFIC abstract:* “The goal of this practice guide is to offer educators specific, evidence-based recommendations for teaching foundational reading skills to students in kindergarten through 3rd grade. This guide is a companion to the existing practice guide, "Improving Reading Comprehension in Kindergarten Through 3rd Grade", and as a set, these guides offer recommendations for preparing students to be successful readers. Both guides recommend some practices that can and should be implemented beginning in kindergarten, and both guides also suggest some instructional practices that can be implemented after students have mastered early reading skills. This guide synthesizes the best available research on foundational reading skills and shares practices that are supported by evidence. It is intended to be practical and easy for teachers to use. The guide includes many examples in each recommendation to demonstrate the concepts discussed. This guide provides teachers, reading coaches, principals, and other educators with instructional recommendations that can be implemented in conjunction with existing standards or curricula and does not recommend a particular curriculum. Teachers can use the guide when planning instruction to support the development of foundational reading skills among students in grades K-3 and in diverse contexts. Professional-development providers, program developers, and researchers can also use this guide. Professional-development providers can use the guide to implement evidence-based instruction and align instruction with state standards or to prompt teacher discussion in professional learning communities. Program developers can use the guide to create more effective early-reading curricula and interventions. Finally, researchers may find opportunities to test the effectiveness of various approaches to foundational reading education and explore gaps or variations in the reading-instruction literature. The following are appended: (1) Postscript from the Institute of Education Sciences; (2) About the Authors; (3) Disclosure of Potential Conflicts of Interest; and (4) Rationale for Evidence Ratings. A glossary is included. [For the companion guide, "Improving Reading Comprehension in Kindergarten through 3rd Grade: IES Practice Guide. NCEE 2010-4038," see ED512029.]”

Groff, C. (2014). Making their voices count: Using students' perspectives to inform literacy instruction for striving middle grade readers with academic difficulties. *Reading Horizons*, 53(1), 1-22. <https://eric.ed.gov/?id=EJ1098041>

*From the ERIC abstract:* "The consequences of lack of reading and poor reading skills are problematic for all students, regardless of background; however, for middle grade striving readers with academic difficulties these problems can lead to lower self-efficacy and motivation to engage in literacy tasks. Using the perspectives of urban, middle grade special education students, this article seeks to demonstrate how teachers can use student interview feedback to differentiate instruction by aligning their voices with appropriate practices. Consistent with previous research, (Roe, 2009; Smith & Wilhelm, 2002), the data show that supportive contexts increase self-efficacy and interest in reading. These perspectives have the potential to provide teachers with better insight about the needs of striving middle grade readers and inform their instructional strategies and materials."

Hall, C. S. (2016). Inference instruction for struggling readers: A synthesis of intervention research. *Educational Psychology Review*, 28(1), 1-22. <https://eric.ed.gov/?id=EJ1090981>

*From the ERIC abstract:* "Skill in generating inferences predicts reading comprehension for students in the elementary and intermediate grades even after taking into account word reading, vocabulary knowledge, and cognitive ability (Cain et al., "Journal of Educational Psychology, 96," 671-81, 2004; Kendeou et al., "Journal of Research in Reading," 31, 259-72, 2008; Oakhill and Cain, "Scientific Studies of Reading," 16(2), 91-121, 2012; Oakhill et al., *Language and Cognitive Processes*, 18, 443-468, 2003). While research shows that struggling readers are less likely than proficient readers to make inferences when reading text (Cain et al., *Memory and Cognition*, 29, 850-859, 2001; "Oakhill, *British Journal of Educational Psychology*," 54, 31-39, 1984), struggling readers may also benefit more from inference instruction than do proficient readers (Hansen and Pearson, "Journal of Educational Psychology," 75(6), 821-829, 1983; McGee and Johnson, *Educational Psychology*, 23(1), 49-59, 2003; Raphael and Pearson, "American Educational Research Journal," 22(2), 217-235, 1985; Yuill and Oakhill, "Applied Cognitive Psychology," 2, 33-45, 1988). This synthesis assessed (a) the effectiveness of inference instruction in improving reading outcomes for struggling readers and (b) the features of instructional interventions (e.g., duration, type of instruction) that were associated with improved outcomes. One single-case design and eight experimental group design studies were synthesized. Mean effect sizes for group design studies ranged from  $g = .072^*$  to  $g = 1.85^*$  for researcher-developed measures of inferential reading comprehension and from  $g = -0.03$  to  $g = 1.96^*$  for standardized measures of reading comprehension. The percentage of non-overlapping data for the study that employed a single-case design was 100% for all measures."

Hedin, L. R. & Conderman, G. (2010). Teaching students to comprehend informational text through rereading. *Reading Teacher*, 63(7), 556-565. <https://eric.ed.gov/?id=EJ880119>

*From the ERIC abstract:* "Informational text presents many obstacles to comprehension for striving readers. Although teachers use many evidence-based practices to support instruction with this type of text, in some situations, readers may be able to increase their comprehension by rereading. Teachers can help students recognize situations in which

rereading is helpful. This article presents features of informational text that readers may find challenging and specific ways to scaffold rereading these sections of text to promote comprehension. (Contains 1 figure and 2 tables.)”

Kent, S. C., Wanzek, J. & Al Otaiba, S. (2017). Reading instruction for fourth-grade struggling readers and the relation to student outcomes. *Reading & Writing Quarterly*, 33(5), 395-411. <https://eric.ed.gov/?id=EJ1155981>

*From the ERIC abstract:* “The present study examined the amount, type, and quality of Tier 1 and supplemental reading instruction provided to 4th-grade struggling readers and whether specific elements of instruction predicted growth in reading skills. In all, 110 students identified as having reading difficulty who were receiving school-based reading instruction in 22 classrooms located in 2 states/sites participated. We observed and coded reading instruction for instructional dimensions, including reading components, grouping, and quality. Reading comprehension and vocabulary were the most prevalent components of instruction, whereas limited time was allocated to word-level reading skills. We noted several significant differences in time allocated to overall instruction and components of instruction during Tier 1 between sites. Overall, there were few unique Tier 1 instructional predictors of student achievement at the end of the year. Students receiving supplemental reading instruction outperformed those students receiving only Tier 1 on measures of oral reading fluency. We discuss implications for instruction and future research.”

Laverick, D. M. (2014). Supporting striving readers through technology-based instruction. *Reading Improvement*, 51(1), 11-19. <https://eric.ed.gov/?id=EJ1041878>

*From the ERIC abstract:* “The purpose of this research was to determine if reading specialist candidates improve the reading proficiency of their students through the use of digital, technology-based teaching techniques and materials. The candidates were certified teachers who provided individualized and small-group instruction to K-6 children while the candidates were enrolled in their capstone seminar and practicum reading courses. The candidates implemented technology-based assessment and instruction during a summer reading program for children who were striving readers. The summer reading program was embedded in the seminar and practicum courses. Data were collected through a questionnaire, observations, and the analysis of a teacher work sample completed by each candidate. Findings indicate that the candidates: (1) perceived the digital technology-based instructional techniques and tools used in the practicum improved their students' reading proficiency and (2) their professional growth was enhanced as a result of implementing these digital techniques and tools. The study concludes that technology-based reading instruction was found to be effective in improving the reading proficiency of striving readers.”

Peterson, D. S. (2014). A culturally responsive alternative to “drill and kill” literacy strategies: Deep roots, civil rights. *Multicultural Perspectives*, 16(4), 234-239. <https://eric.ed.gov/?id=EJ1043215>

*From the ERIC abstract:* “This article describes two approaches to improving literacy in a high poverty, diverse urban high school. One curriculum program, "Striving Readers,"

included a prescribed course of study for students reading below grade level along with schoolwide strategies. This approach did not improve targeted students' reading scores or motivation to read. The alternative approach, "Deep Roots: Civil Rights," was a culturally responsive curriculum that had a strong impact on the identified students' academic development as well as their understanding of racism in this country. An examination of "Striving Readers" and "Deep Roots: Civil Rights" projects provides insight into the impact of the curriculum on student achievement and motivation. At a time when many schools are implementing the Common Core State Standards, this article is a reminder that a compelling, rigorous, culturally responsive curriculum best serves all our nation's schoolchildren. Projects such as "Deep Roots: Civil Rights" provide an effective alternative or complement to prescribed reading programs."

Somers, M-A., Corrin, W., Sepanik, S., Salinger, T., Levin, J., & Zmach, C. (2010). The enhanced reading opportunities study final report: The impact of supplemental literacy courses for struggling ninth-grade readers (NCEE 2010-4021). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. <https://eric.ed.gov/?id=ED511811>

*From the ERIC abstract:* "According to the National Assessment of Educational Progress (NAEP), just over 70 percent of students nationally arrive in high school with reading skills that are below "proficient"--defined as demonstrating competency over challenging subject matter. Of these students, nearly half do not exhibit even partial mastery of the knowledge and skills that are fundamental to proficient work at grade level. These limitations in literacy skills are a major source of course failure, high school dropout, and poor performance in postsecondary education. While research is beginning to emerge about the special needs of striving adolescent readers, very little is known about effective interventions aimed at addressing these needs. To help fill this gap and to provide evidence-based guidance to practitioners, the U.S. Department of Education initiated the Enhanced Reading Opportunities (ERO) study--a demonstration and rigorous evaluation of supplemental literacy programs targeted to ninth-grade students whose reading skills are at least two years below grade level. As part of this demonstration, 34 high schools from 10 school districts implemented one of two reading interventions: Reading Apprenticeship Academic Literacy (RAAL), designed by WestEd, and Xtreme Reading, designed by the University of Kansas Center for Research on Learning. These programs were implemented in the study schools for two school years. The U.S. Department of Education's (ED) Office of Elementary and Secondary Education (OESE) funded the implementation of these programs, and its Institute of Education Sciences (IES) was responsible for oversight of the evaluation. MDRC--a nonprofit, nonpartisan education and social policy research organization--conducted the evaluation in partnership with the American Institutes for Research (AIR) and Survey Research Management (SRM). The goal of the reading interventions--which consist of a year-long course that replaces a ninth-grade elective class--is to help striving adolescent readers develop the strategies and routines used by proficient readers, thereby improving their reading skills and ultimately, their academic performance in high school. The first two reports for the study evaluated the programs' impact on the two most proximal outcomes targeted by the interventions--students' reading skills and their reading behaviors at the end of ninth grade. This report--which is the final of three reports for this evaluation--examines the

impact of the ERO programs on the more general outcomes that the programs hope to affect--students' academic performance in high school (grade point average [GPA], credit accumulation, and state test scores) as well as students' behavioral outcomes (attendance and disciplinary infractions). These academic and behavioral outcomes are examined during the year in which they were enrolled in the ERO programs (ninth grade), as well as the following school year (tenth grade for most students). Appendices include: (1) The ERO Programs and the ERO Teachers; (2) ERO Student Survey Measures; (3) ERO Implementation Fidelity; (4) State Tests Included in the ERO Study; (5) Response Analysis and Baseline Comparison Tables; (6) Technical Notes for Impact Findings; (7) Statistical Power and Minimum Detectable Effect Size; (8) Supplementary Impact Findings; (9) Baseline and Impact Findings, by Cohort; (10) The Association Between Reading Outcomes and Academic Performance in High School; (11) Variation in Impacts Across Sites and Cohorts; (12) Program Costs; and (13) Poststudy Adolescent Literacy Programming in the ERO Schools: Methodology and Additional Findings. (Contains 97 tables, 23 figures, 2 boxes, and 185 footnotes.) [This paper was written with Edmond Wong. For the first-year report, see ED499778. For the second report, see ED503380.]”

What Works Clearinghouse (2007). Corrective reading: What Works Clearinghouse (WWC) intervention report. Washington, DC: Author. U.S. Department of Education, Institute of Education Sciences. <https://eric.ed.gov/?id=ED497718>

*From the ERIC abstract:* ““Corrective Reading” is designed to promote reading accuracy (decoding), fluency, and comprehension skills of students in third grade or higher who are reading below their grade level. The program has four levels that address students’ decoding skills and six levels that address students' comprehension skills. All lessons in the program are sequenced and scripted. “Corrective Reading” can be implemented in small groups of four to five students or in a whole-class format. Corrective Reading is intended to be taught in 45-minute lessons four to five times a week. The WWC considers the extent of evidence for Corrective Reading to be small for alphabets, fluency, and comprehension. The WWC reviewed 25 studies on “Corrective Reading.” One study met the WWC evidence standards. This study included 79 third-grade students in Pennsylvania. Based on this one study, the WWC found potentially positive effects in the alphabets and fluency domains and no discernible effects in the comprehension domain. [The following study is reviewed in this intervention report: 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 Website: <http://www.ed.gov/rschstat/eval/disadv/title1interimreport/index.html>.]”

Williams, E. (2014). Breaking the barriers to reading success in middle and high schools. *Reading Improvement*, 51(2), 233-236. <https://eric.ed.gov/?id=EJ1034942>

*From the ERIC abstract:* “For decades, minority students have been falling behind non-minority students, and schools have been striving to bridge this gap. It has, indeed, been challenging for middle and high schools, especially when striving to increase reading achievement: Since most middle and high school teachers are non-English teachers, they

lack reading instruction preparation, thus, fall short when attempting to help struggling readers. Unfortunately, if these schools continue to fall short, the students and even our nation will be affected. Therefore, this article describes strategies that successful middle and high schools have implemented such as Sustained Silent Reading (SSR) and trade books to break through the tough reading barriers that once prevented student achievement.”

### ***Additional Organizations to Consult***

**U.S. Department of Education: Striving Readers Comprehensive Literacy (SRCL) Program—**<https://www2.ed.gov/programs/strivingreaders-literacy/awards.html>

*From the website:* “The purpose of the SRCL Program is to advance literacy skills for students from birth through grade 12 including pre-literacy skills, reading and writing, including limited-English-proficient students and students with disabilities.” More information and copies of SRCL Comprehensive Literacy Plans can be found at <http://www2.ed.gov/programs/strivingreaders-literacy/literacyprofiles.html>.

**What Works Clearinghouse—** <https://ies.ed.gov/ncee/wwc/FWW>

*From the website:* “The What Works Clearinghouse (WWC) reviews the existing research on different *programs, products, practices, and policies* in education. *Our goal* is to provide educators with the information they need to make evidence-based decisions. We focus on the results from *high-quality research* to answer the question “What works in education?”

Reviews of Individual Studies: Striving Readers—  
<https://ies.ed.gov/ncee/wwc/ReviewedStudies#/Keyword:Striving%20Readers,FWWFilterId:3,OnlyStudiesWithPositiveEffects:false,SetNumber:1>

Reviews of Individual Studies: Struggling Readers—  
<https://ies.ed.gov/ncee/wwc/ReviewedStudies#/Keyword:Struggling%20Readers,FWWFilterId:3,OnlyStudiesWithPositiveEffects:false,SetNumber:1>

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## **Methods**

### ***Keywords and Search Strings***

The following keywords and search strings were used to search the reference databases and other sources:

Striving readers

Struggling readers and student outcomes



## *Databases and Resources*

We searched ERIC for relevant resources. ERIC is a free online library of over 1.6 million citations of education research sponsored by the Institute of Education Sciences. Additionally, we searched Google Scholar and PsychInfo.

## *Reference Search and Selection Criteria*

When we were searching and reviewing resources, we considered the following criteria:

*Date of the publication:* References and resources published for last 15 years, from 2002 to present, were included in the search and review.

*Search Priorities of Reference Sources:* Search priority is given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, academic databases, including ERIC, EBSCO databases, JSTOR database, PsychInfo, PsychArticle, and Google Scholar.

*Methodology:* Following methodological priorities/considerations were given in the review and selection of the references: (a) study types – randomized control trials, quasi experiments, surveys, descriptive data analyses, literature reviews, policy briefs, etc., generally in this order (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected, etc.), study duration, etc. (c) limitations, generalizability of the findings and conclusions, etc.

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This memorandum is one in a series of quick-turnaround responses to specific questions posed by stakeholders in the Southwest Region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), which is served by the Regional Educational Laboratory (REL) Southwest at SEDL. This memorandum was prepared by REL Southwest under a contract with the U.S. Department of Education's Institute of Education Sciences (IES), Contract ED-IES-12-C-0012, administered by SEDL. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.