

# What Works Clearinghouse



## SpellRead™

### Program Description<sup>1</sup>

*SpellRead™* (formerly known as *SpellRead Phonological Auditory Training®*) is a literacy program for struggling readers in grades 2 or above, including special education students, English language learners, and students more than two years below grade level in reading. *SpellRead™* integrates the auditory and

visual aspects of the reading process and emphasizes specific skill mastery through systematic and explicit instruction. The program takes five to nine months to complete and consists of 140 lessons divided into three phases.

### Research

Two studies of *SpellRead™* met the What Works Clearinghouse (WWC) evidence standards. The two studies included 208 students from first to third grades in Pennsylvania and in Newfoundland, Canada.<sup>2</sup> The WWC considers the extent of

evidence for *SpellRead™* to be small for alphabets, fluency, and comprehension. No studies that met WWC evidence standards with or without reservations addressed general reading achievement.

### Effectiveness

*SpellRead™* was found to have positive effects on alphabets and potentially positive effects on fluency and comprehension.

	Alphabets	Fluency	Comprehension	General reading achievement
Rating of effectiveness	Positive	Potentially positive	Potentially positive	na
Improvement index <sup>3</sup>	Average: +18 percentile points	Average: +9 percentile points	Average: +20 percentile points	na
	Range: +2 to +44 percentile points	Range: +1 to +20 percentile points	Range: +1 to +37 percentile points	na

na = not applicable

- The descriptive information for this program was obtained from publicly available sources: the curriculum’s website (www.spellread.com, 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. At the time of this review, the program was known as *Kaplan SpellRead*. Distribution rights have since been transferred to PCI Education.
- The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
- These numbers show the average and range of student-level improvement indices for all findings across the studies.

## Additional program information

### Developer and contact (updated: November 2010)

*SpellRead*™ is distributed through PCI Education. Address: 4560 Lockhill Selma Rd., Ste. 100, San Antonio, TX, 78249-2075. Web: <http://www.pcieducation.com/spellread/default.aspx>. Telephone: (800) 594-4263.

### Scope of use

The program is currently being used in schools in Florida, Maryland, Virginia, and Pennsylvania. According to the current distributor, most of the students receiving the program are two or more years below grade level in reading, are receiving special education services, or are English language learners. The number of schools and students using the program is not available. In 2006 Kaplan K12 acquired *SpellRead*, the developer and distributor of *SpellRead Phonological Auditory Training*®.

### Teaching

*SpellRead*™ consists of 140 lessons implemented in three distinct phases that interweave phonemics, phonetics, and instruction in language-based reading and writing. Phase A (50 lessons) is designed to train the auditory process function of the brain to hear and manipulate the 44 sounds of the English language.

Phase B (30 lessons) focuses on secondary spelling of vowel sounds, consonant blends, and syllabication of two-syllable words. Phase C (25 lessons) focuses on how to decode words of three or more syllables, as well as clusters and verb forms. The *SpellRead*™ program is used with small groups of five students and one instructor in 60–90 minute classes. Each lesson includes activities to develop phonemic, phonetic, semantic, syntactic, comprehension/vocabulary, and fluency skills.

*SpellRead*™ includes comprehensive professional development and ongoing expert support to educators as they implement the program, including five days of initial workshops, two follow-up workshops, and regular on-site coaching visits. A web-based Instructor Support System allows educators to closely monitor student progress.

### Cost

The cost of implementation in a school or a school district varies based on the number of participating students and their grade level (elementary, middle, or high) and on the number of teachers or schools participating in the program. Cost information is available from the distributor.

## Research

Two studies reviewed by the WWC investigated the effects of *SpellRead*™. Both studies (Torgesen et al., 2006; Rashotte, MacPhee, & Torgesen, 2001) were randomized controlled trials that met WWC evidence standards.

### Met evidence standards

Torgesen et al. (2006) examined the effects of *SpellRead*™ on 203 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.

Rashotte, MacPhee, & Torgesen (2001) randomly assigned 47 first-grade and second-grade students from one school in Newfoundland, Canada, to the intervention and comparison groups. Students in the intervention group received the *SpellRead*™ program. Students in the comparison group received the regular literacy-based reading program at their school.

### Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or medium to large (see the What Works Clearinghouse Extent of Evidence Categorization Scheme). The extent of

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 of the Beginning Reading review, only the data on the third-grade students were included in this review.

## Research *(continued)*

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.<sup>5</sup> The WWC considers the extent of evidence for *SpellRead*<sup>TM</sup> 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> The studies included in this report cover three domains: alphabetics, fluency, and comprehension.

*Alphabetics.* Torgesen et al. (2006) examined four outcomes in the phonics construct of the alphabetics domain—the Woodcock Reading Mastery Test–Revised (WRMT–R) word identification and word attack subtests and the Test of Word Reading Efficiency (TOWRE) phonemic decoding efficiency and sight word efficiency subtests. The authors reported statistically significant effects of *SpellRead*<sup>TM</sup> on two of these outcomes (the WRMT–R word attack subtest and the TOWRE decoding efficiency subtest). The statistical significance of these findings was consistent with the WWC calculation. The average effect size across the four outcomes was large enough to be considered substantively important according to WWC criteria (that is, an effect size of at least 0.25).

Rashotte, MacPhee, & Torgesen (2001) examined seven outcomes in the alphabetics domain—WRMT–R word identification and word attack subtests; the TOWRE phonetic decoding efficiency and sight word efficiency subtests; and the Comprehensive Test of Phonological Processing (CTOPP) elision, blending words, and segmenting words subtests. The authors reported statistically significant positive effects on six of the outcomes. However, the WWC analysis confirmed statistically significant differences for only four of the outcomes (WRMT–R word attack subtest, the TOWRE phonetic decoding efficiency

subtest, and the CTOPP blending words and segmenting words subtests). The average effect size across all seven outcomes was statistically significant and positive.

*Fluency.* Torgesen et al. (2006) examined one outcome in this domain (the Oral Reading Fluency test) and reported no statistically significant effect. The effect size was not large enough to be considered substantively important.

Rashotte, MacPhee, & Torgesen (2001) examined two outcomes in the fluency domain and reported statistically significant positive effects for the outcomes (the Gray Oral Reading Tests [GORT-3] accuracy and rate subtests). However, none of those effects were statistically significant according to WWC analysis. The average effect size across the two outcomes was large enough to be considered substantively important.

*Comprehension.* Torgesen et al. (2006) examined two outcomes in this domain—the WRMT–R passage comprehension subtest and the GRADE passage comprehension subtest—and reported no statistically significant effects. The average effect size across the two outcomes was neither statistically significant nor large enough to be considered substantively important.

Rashotte, MacPhee, & Torgesen (2001) examined two outcomes in the comprehension domain—the Woodcock Diagnostic Reading Battery (WDRB) passage comprehension subtest and the GORT-3 comprehension subtest—and reported statistically significant effects for both outcomes. The statistical significance of these findings was consistent with the WWC calculation. The average effect size across the two outcomes was also statistically significant and positive.

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.

6. For definitions of the domains, see the Beginning Reading Protocol.

## Effectiveness *(continued)*

### The WWC found *SpellRead™* to have positive effects on alphabets and potentially positive effects on fluency and comprehension

#### 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

#### 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.

## References

#### Met WWC evidence standards

- Rashotte, C. A., MacPhee, K., & Torgesen, J. K. (2001). The effectiveness of a group reading instruction program with poor readers in multiple grades. *Learning Disability Quarterly*, 24(2), 119–134.
- Torgesen, J., Myers, D., Schirm, A., Stuart, E., Vartivarian, S., Mansfield, W., et al. (2006). *National assessment of Title I interim*

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 average improvement index for alphabets is +18 percentile points across the two studies, with a range of +2 to +44 percentile points across findings. The average improvement index for fluency is +9 percentile points across the two studies, with a range of +1 to +20 percentile points across findings. The average improvement index for comprehension is +20 percentile points across the two studies, with a range of +1 to +37 percentile points across findings.

#### Summary

The WWC reviewed two studies on *SpellRead™*. Both studies met WWC evidence standards. Based on these two studies, the WWC found positive effects in alphabets and potentially positive effects in fluency and comprehension. The evidence presented in this report may change as new research emerges.

*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>

**For more information about specific studies and WWC calculations, please see the WWC *SpellRead™* Technical Appendices.**

7. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation, see the WWC Tutorial on Mismatch. See the Technical Details of WWC-Conducted Computations for the formulas the WWC used to calculate the statistical significance. In the case of *SpellRead™*, a correction for multiple comparisons was needed.